Report of the Committee on Fiscal Statistics

September 2018

National Statistical Commission Government of India

Forwarding Letter

20th September 2018

Dear Dr. Barman

It gives me great pleasure to submit the Report of the Fiscal Statistics Committee constituted by the National Statistical Commission. I would take this opportunity to thank you and the members of the National Statistical Commission (NSC) for giving us the opportunity to undertake an assessment of the status of compilation, aggregation and publication of fiscal data in India and suggest suitable measures to resolve some of the significant deficiencies.

The Committee initially met twice to identify major issues facing the compilation and collation of fiscal data at the level of central, state and local governments. Subsequently, the Report was prepared by online collaboration amongst the members of the Committee. I take this opportunity to thank Professor Pinaki Chakraborty, Member Secretary to the Committee for playing a pivotal role in the preparation of the Report in spite of the constraint of not having a suitable secretarial support. I also thank Dr. Rathin Roy, Director, NIPFP, and the members nominated by RBI and CSO to the Committee for their valuable contributions. I thank all other esteemed members of the Committee for their participation and contribution.

Thanking you again on behalf of the Committee on Fiscal Statistics and on my own behalf.

With best regards,

Dr. R.B. Barman Chairman National Statistical Commission New Delhi D.K. Srivastava Chairman

Fiscal Statistics Committee

Foreword

Statistics contains valuable information and constitutes an economic good. Within the domain of economic statistics, fiscal statistics have a preeminent importance. Suitably anonymized and aggregated, fiscal statistics becomes a public good meant for common consumption since all taxpayers have a right to know how tax and non-tax revenues are being raised, and how these are utilized to provide public, merit and private goods. The National Statistical Commission headed by Dr. R. Barman constituted a Fiscal Statistics Committee with eminent public finance experts and representation from important institutions such as the RBI, the CSO and from the central and state governments.

This Report is the result of the joint endeavour of the members of the Committee. I am grateful to all members of the Committee who made valuable contributions to its deliberations. This includes both experts in their individual capacities and institutional representatives. I would like to thank Professor Pulin Nayak for his valuable insights. Among the institutional representatives, I would particularly like to acknowledge the contributions made by the RBI and the CSO.

I would take this opportunity to thank Dr. Rathin Roy, Director, NIPFP, for not only adding value to the deliberations of the Committee as its Member but also kindly agreeing to give us access to the NIPFP premises for holding the meetings of the Committee.

Prof. Pinaki Chakraborty, Professor, NIPFP was appointed as the Member Secretary of the Committee on Fiscal Statistics. The Committee unfortunately was not provided with necessary secretarial assistance. Request for appointment of a Consultant to assist the Committee also did not materialize. Also, State governments of Maharashtra, Uttar Pradesh, Tamil Nadu, West Bengal and Assam were supposed to nominate IT-In Charge budget to the Committee. None of these State governments sent any nomination.

I would like to thank Prof. Pinaki Chakraborty, who as Member Secretary to the Committee played a pivotal role not only in organizing the work of the Committee but also actively contributing to and coordinating the drafting of the Report.

Shreya Pandey, Consultant NIPFP helped the member secretary in his work.

I would also like to thank my colleagues, Muralikrishna Bharadwaj, Ragini Trehan and Tarrung Kapur for providing valuable support.

D.K. Srivastava

Committee on Fiscal Statistics

- 1. Dr. D.K.Srivastava, Former Director, Madras School of Economics, Chairman
- 2. Chief Economic Advisor, Ministry of Finance, Co-Chair
- 3. Dr. Pinaki Chakrabarty, National Institute of Public Finance and Policy, Member-Secretary
- 4. Prof Pulin Nayak, Delhi School of Economics, New Delhi, Member
- 5. Dr.Rathin Roy, Director, National Institute of Public Finance and Policy, Member
- 6. Dr. Errol D'souza, Indian Institute of Management, Ahmedabad, Member
- 7. Executive Director, Department of Economic Policy & Research (DEPR), RBI Member
- 8. IT Head of Controller General of Accounts, Member
- 9. Dr. Santosh Mathew, Joint Secretary, Ministry of Rural Development
- 10. Representative from National Account Division, CSO, Member
- 11. Representative from National Informatics Centre, Member
- 12. IT in-charge (Budget), Maharashtra, Member
- 13. IT in-charge (Budget), Uttar Pradesh, Member
- 14. IT in-charge (Budget), Tamil Nadu, Member
- 15. IT in-charge (Budget), West Bengal, Member
- 16. IT in-charge (Budget), Assam, Member
- 17. Representative from Ministry of Railways, Member
- 18. Principal CGM, Department of Government Accounts, RBI Member

Table of Contents

For	warding Letteriii
For	ewordiv
Coı	nmittee on Fiscal Statisticsv
Tab	ole of Contentsvi
List	t of Charts and Tablesvii
List	t of Abbreviationsviii
1.	Fiscal Data System in India: Key Issues
2.	Sources of Fiscal Statistics: Aggregation and Coordination
3.	Centre's Fiscal Statistics: Playing a Pivotal Role
4.	States' Fiscal Statistics: Facilitating Public Provision of Services
5.	Local Level Fiscal Statistics: Augmenting Decentralized Governance
6.	Granular Fiscal Data: Realizing Potential
7.	High Frequency Data: Gathering Momentum
8.	Fiscal Data Coordination: Conceptualizing a Fiscal Council
9.	Summary and Recommendations
Anı	nex 1: List of Central Ministries/ Departments
Anı	nex 2: MoM of Second Meeting of Fiscal Statistics Committee
Anı	nex 3: MoM of First Meeting of Fiscal Statistics Committee
Anı	nex 4: Recommendations on Maintenance of Data by the 14th Finance Commission117
Anı	nex 5: Observations on Maintenance of Data by the 13th Finance Commission119
Anı	nex 6: Excerpts from Report of the National Statistical Commission on Fiscal Statistics 121
List	t of References129

List of Charts and Tables

Charts

Chart 1.1 Structure of Federal Governance in India	3
Chart 1.2 Typical Structure of Government Accounts	6
Chart 2.1 Universe of Fiscal Data Sources	18
Chart 2.2 Transformation of Primary Micro-level Fiscal Data to Fiscal Aggregates	21
Chart 6.1 PFMS – Financial Network	69
Chart 6.2 Role assigned to GSTN as IT interface	71
Chart 6.3 Illustrative compliance under GST	73
Chart 6.4 ASP-GSP Implementation Framework	74
Chart 7.1 Pattern of Seasonal Unevenness: Total Receipts	81
Chart 8.1 Fiscal Councils around the World	86
Chart 8.2 Number of independent Fiscal Councils in the world (2016)	89
Chart 8.3 Fiscal Councils Remit (Percent of Fiscal Councils' Population)	89
Tables	
Table 1:1: Subjects in the 7th Schedule of Constitution having a Bearing on Information	on4
Table 5:1 Data issues faced by SFCs: A Summary	58
Table 6:1 PFMS-Treasury Interface	70
Table 7:1 Some High Frequency Fiscal Data Series: An Illustrative List	79
Table 7:2 High Frequency Indicators	82

List of Abbreviations

Sl. No.	Abbreviation	Description
1	ACES	Automation of Central Excise and Service Tax
2	ADEPT	Analytics for Debtor Profiling and Targeting
3	AFS	Annual Financial Statement
4	AG	Accountant General
5	AI	Artificial Intelligence
6	AGIMO	Australian Government Information Management Office
7	AIR	Annual Information Return
8	APIs	Application Programming interfaces
9	APMS	Audit Para Monitoring System
10	ASP	Application Service Provider
11	ATAA	Abusive Tax Avoidance Transactions
12	ATNs	Action Taken Notes
13	ATO	Australian Tax Office
14	B2B	Business-to-business
15	B2C	Business-to-consumer
16	BE	Budget Estimate
17	BI	Business Intelligence
18	BSF	Border Security Force
19	CAC	Chief Advisor Cost
20	CAG	Comptroller and Auditor General of India
21	CBDT	Central Board of Direct Taxes
22	CBEC	Central Board of Excise and Customs
23	CBI	Central Bureau of Investigation
24	CBIC	Central Board of Indirect Taxes and Customs
25	CBO	Congressional Budget Office
26	CBR	Central Boards of Revenue
27	CBS	Core Banking Solution
28	CEA	Chief Economic Advisor
29	CEIB	Central Economic Intelligence Bureau
30	CGA	Controller General of Accounts
31	CGST	Central Goods and Services Tax
32	CIB	Central Information Branch
33	CINB	Corporate Internet Banking
34	CIT	Corporate Income Tax
35	CPAO	Central Pension Accounting Office
36	CPC	Centralized Processing Cell
37	CPENGRAMS	Centralized Pension Grievance Redress and Monitoring System
38	CPPCs	Centralized Pension Processing Centres
39	CPSMS	Central Plan Scheme Monitoring System
40	CRA	Canada Revenue Agency
41	CRCA	Commissioners for Revenue and Customs Act
42	CSO	Central Statistics Office
43	CTRs	Cash Transaction Reports
44	DBT	Direct Benefit Transfer

45	DDM	Directorate of Data Management
46	DEA	Department of Economic Affairs
47	DGCEI	Directorate General of Central Excise Intelligence
48	DGFT	Directorate General of Foreign Trade
49	DI&CI	Directorate of Intelligence and Criminal Investigation
50	DMA	Data-Matching Program (Assistance and Tax) Act, 1990
51	DP&PW	Department of Pension and Pensioners' Welfare
52	DRI	Directorate of Revenue Intelligence
53	DSC	Digital Signature Certificate
54	DTAAs	Double Tax Avoidance Agreements
55	DW& BI	Data warehouse and Business intelligence
56	e RAS	Electronic Risk Assessment Software
57	ED	Enforcement Directorate
58	EDI	Electronic Data Interchange
59	EDW	Enterprise data warehouse
60	EFS	Enforcement Information System
61	EIC	Economic Intelligence Council
62	EPFO	Employees' Provident Fund Organization
63	ERP	Enterprise Resource Planning
64	ES	Economic Survey
65 66	ESIC FC	Employees' State Insurance Corporation Finance Commission
67	FD	Fiscal Deficit
68	FEMA	Foreign Exchange Management Act, 1999
69	FIIs	Foreign Institutional Investors
70	FIU	Financial Intelligence Unit
71	FRBM	Fiscal Responsibility and Budget Management
72	FSC	Fiscal Statistics Committee
73	FTI	Federal Tax Information
74	GDP	Gross Domestic Product
75	GEI	Group on Economic Intelligence
76	GeM	Government e-Market Place
77	GFD	Gross Fiscal Deficit
78	GLDEP	Governmental Liaison Data Exchange Programme
79	GoI	Government of India
80	GP	Gram Panchayat
81	GSDP	Gross State Domestic Product
82	GSP	GST Suvidha Provider
83	GST	Goods and Services Tax
84	GSTN	GST Network
85	GSTR	GST Return
86	HLEC	High Level Expert Committee
87	HMRC	Her Majesty's Revenue and Customs
88	HRA	House Rent Allowance
89	HSN	Harmonized System of Nomenclature
90	IAY	Indira Awas Yojana
91	IB	Intelligence Bureau

0.2	ICEC A TE	Indian Customs Electronic Commerce/Electronic Data
92	ICEGATE	interchange (EC/EDI) Gateway
93	ICES	Indian Customs EDI System
94	ICT	Information and Communication Technology
95	IEBR	Internal and Extra Budgetary Resources
96	IFMIS	Integrated Financial Management Information System
97	IGAS	Indian Government Accounting Standard
98	IGST	Integrated Goods and Services Tax
99	IIA	Institute of Internal Auditors
100	IMF	International Monetary Fund
101	IPFS	Indian Public Finance Statistics
102	IOT	Internet of Things
103	IRC	Internal Revenue Code
104	IRS	Internal Revenue Service
105	IT	Information Technology
106	ITD	Income Tax Department
107	ITD-MS	Integrated Taxpayer Data Management System
108	LBs	Local Bodies
109	LMMHA	List of Major and Minor Heads of Accounts
110	LTC	Leave Travel Concession
111	MNREGA	Mahatma Gandhi National Rural Employment Guarantee Act
112	MoM	Minutes of Meeting
113	MOSPI	Ministry of Statistics and Program Implementation
114	MoU	Memorandum of Understanding
115	MPS	Minimum Protection Standards
116	NAS	National Accounts Statistics
117	NBFCs	Non-Banking Financial Companies
118	NCB	Narcotics Control Bureau
119	NCT	National Capital Territory
120	NDRF	National Disaster Response Fund
121	NEFT	National Electronic Funds Transfer
122	NGOs	Non-Governmental Organizations
123	NIA	National Investigation Agency
124	NIC	National Informatics Centre
125	NIPFP	National Institute of Public Finance and Policy
126	NSC	National Statistics Committee
127	NSDL	National Securities Depository Limited
128	NSSF	National Small Saving Fund
129	NSSO	National Sample Survey Office
130	NTRP	Non-Tax Receipt Portal
131	OBC	Other Backward Classes
132	OBR	Office of Budget Responsibility
133	OECD	Organization for Economic Cooperation and Development
134	PAC	Public Accounts Committee
135	PAOs	Pay and Accounts Offices
136	PAYE	Pay As You Earn
137	PD	Personal Deposit

138	PFMS	Public Financial Management System
139	PIT	Personal Income Tax
140	PMLA	Prevention of Money Laundering Act, 2002
141	POL	Petroleum, Oils and Lubricants
142	POS	Place of Supply
143	PPA	Print Payment Advice
144	PPOs	Pension Payment Order
145	PPP	Public-Private Partnership
146	PrAO	Principal Account Office
147	PRIASoft	Panchayati Raj Institutions Accounting Software
148	PRIs	Panchayati Raj Institutions
149	PSBs	Public Sector Banks
150	QETP	Questionable Employment Tax Programme
151	RAW	Research and Analysis Wing
152	RBI	Reserve Bank of India
153	RE	Revised Estimate
154	REICs	Regional Economic Intelligence Committees
155	RFID	Radio frequency identification
156	RNR	Revenue Neutral Rate
157	RSP&PR	Research and Statistics Wing of the Directorate of Income Tax
158	RT	Return Type
159	RTI	Right to Information
160	SAC	Services Accounting Code
161	SC	Scheduled Caste
162	SDDS	Special Data Dissemination Standards
163	SEBI	Securities and Exchange Board of India
164	SFC	State Finance Commission
165	SFIO	Serious Fraud Investigation Office
166	SGST	State Goods and Services Tax
167	SIEN	Secured Information Exchange Network
168	SLAs	Service Level Agreements
169	SMEs	Small and Micro Enterprises
170	SSAs	Special Seal Authority
171	ST	Scheduled Tribe
172	STRs	Suspicious Transaction Reports
173	TAA	Taxation Administration Act, 1953
174	TARC	Tax Administration and Reform Commission
175	TDS	Tax Deducted at Source
176	TEP	Tax Evasion Petitions
177	TIEAs	Tax Information Exchange Agreements
178	ToR	Terms of Reference
179	UT	Union Territories
180	UTGST	Union Territory Goods and Services Tax
181	VAT	Value Added Tax
182	WMA	Ways and Means Advances

1. Fiscal Data System in India: Key Issues

- 1.1 'Fisc' literally means public treasury or exchequer. All data pertaining to inflows into and outflows from government treasuries therefore constitute fiscal data. Broadly interpreted, fiscal data comprise data relating to government accounts including public sector accounts at all levels of government. A government budget is an annual summary of millions of transactions leading to government receipts and expenditures throughout the year. A typical government budget not only summarises past fiscal transactions into suitable categories but also provides estimates of anticipated or planned receipts and expenditures. Thus, all fiscal data are not records of past transactions but these may also provide estimates of transactions that are yet to occur. Since India has a federal system of governance consisting of central, state and local governments, fiscal data cover the budgetary accounts of each individual government, their consolidated accounts, and all the inter-governmental transactions.
- 1.2 Fiscal statistics like all other official statistics is a public good. Barman (2018) writes "Official Statistics is a public good that informs, supports and sustains democracy and advances socio-economic development". As a public good, fiscal statistics must be reliable, transparent and publically provided. As such, it is to be funded by the taxpayers for the collective consumption of the citizens and the institutions.
- 1.3 Governments in India considered together collectively play the role of being the largest economic agent in the economy. The size of the government in India as measured by government expenditure as percentage of GDP may be in the range of 26% to 29% at current market prices¹. Thus the macro-health of the economy critically depends on the goods and services collectively purchased and provided by the governments at different levels. Private players of the economy, consisting of investors and savers, producers and consumers, importers and exporters as well as a variety of institutions including banks and financial institutions eagerly look to government decisions regarding purchases and supplies of goods and services which vitally affect their economic activities. Similarly, government's economic policy, based on the analysis of fiscal and macroeconomic data, is critical for the private stakeholders. Although economic policy is a broader concept, fiscal policy plays a critical role in the overall policy framework of the government. Thus, the economic health and well-being of a country crucially depends on the quality, availability, and accessibility of fiscal data, which provides valuable information to both governmental and non-governmental entities.
- 1.4 Unfortunately, the compilation and dissemination of fiscal data in India falls well short of desirable norms and suffers from a number of infirmities. Improving our fiscal data system may lead directly to augmenting policy efficiency, increased growth, and welfare-enhancing outcomes. In this context, the National Statistical Commission (NSC) constituted the Fiscal Statistics Committee (FSC) mandating it to examine the fiscal data management in India with reference to the following ToR.

1

¹ In 2014-15 for which IPFS gives actual data for the combined expenditure of centre and state governments, the total expenditure amounts to 25.6% of GDP and for 2015-16 (RE), it is estimated at 28.9% of GDP. To this, we should add about 1.5% to 2% of GDP as expenditure of the local governments. However, no consolidated data on local government expenditure are available. For the combined expenditure of central and state governments, expenditure is financed by tax revenues (16-17% of GDP), fiscal deficit (up to 7% of GDP), non-tax revenues and non-debt capital receipts.

Terms of Reference for the Committee on Fiscal Statistics

- 1. To review the status on implementation of recommendations of National Statistical Commission on Institutional Mechanism for repository of Fiscal Statistics and subsequent committees of NSC to identify areas needing action for improving fiscal statistics;
- 2. To recommend suitable measures to strengthen systems and processes for collection, collation and dissemination of these statistics with possibility for improving timeliness;
- 3. To take stock of existing Information Technology deployment for collection of granular data from primary sources and recommend suitable measures to establish/revamp system for (i)processing and (2) periodic audit through deep drive of integrated system for and recommend a nodal agency as data repository;
- 4. To examine present system for dissemination of data and recommend measures for improvement consistent with international standard.
- 1.5 In a meeting of the Chairpersons, Co-chairpersons and Member Secretaries of the 5 Committees constituted by the NSC that took place in the Niti Ayog on 24 October 2016, Dr. Barman, NSC Chairman had suggested that these committees should look at the following subjects:
 - Identifying the data inputs, data source agencies and data definitions
 - Output based on input periodicity-In the context of fiscal data, linking the outlays at the level of implementation and outcome
 - Methodology for aggregation of data at various levels
 - Audit trails-audits at various levels
 - System of online reporting of data wherever possible
 - Master data management and data governance framework
 - Development of dataset, data models including tools for multidimensional view and analysis
- 1.6 Capturing, compiling, organizing, publishing and analysing fiscal statistics are vital for facilitating policy analysis, forecasting and determining responses to unanticipated economic changes in a timely and effective manner. There is a need to take advantage of the available IT and digitization platforms that have opened up unprecedented opportunities for managing fiscal data. Current methods and procedures for capturing and compiling fiscal data may be analysed in terms of the following:
 - 1. Generation of fiscal data;
 - 2. Compilation of fiscal data including aggregation and classification of fiscal data;
 - 3. Organization and Publication of fiscal data; and
 - 4. Analysis of fiscal data

India's System of Federal Governance

1.7 Since India is a system of federal governance with three tiers of government and certain specialized levels of autonomous governance organizations, a full picture of government's intervention in the economy at macro and micro levels requires consideration of issues of

uniformity of definitions, compilation, aggregation, and capturing of intergovernmental transfers. The structure and ambit of federal governance in India are depicted in Chart 1.1.

Autonomous regions (10)*

Urban (4,636)

Urban (4,636)

Rural (2,62,524)

Municipal Corporations (2222)

Municipal Corporations (2222)

Gram Sabha

Gram Panchayat (2,55,245)

Chart 1.1 Structure of Federal Governance in India

Source: Compiled from information from Second Administrative Reforms Commission, fifth report, April 2009

1.8 Apart from the central government, there are 29 state governments, 5 Union Territories (UTs) of which 2 are with their own legislatures, and nearly 2.67 lakh local governments consisting both of urban and rural local bodies.

Conceptualizing Information Federalism

- 1.9 Just as newly evolving areas in fiscal federalism such as resource federalism and environmental federalism, we can conceptualize Information Federalism which has the potential to develop into the critical dimension of relationship between the central, state and local governments in a federal system. The central government has access to the largest amount of information including fiscal information among these governments. It has access to various digital platforms and has the power to regulate on most of these subjects. Under the Constitution, it is the central government which has the overarching powers in managing and communicating information through its responsibility for handling statistics and communications. Under the Constitutional powers, the CSO, the RBI and the offices of the CAG and CGA have been set up to serve as the key institutions in managing fiscal statistics.
- 1.10 Telecommunications have become a significant source of access to granular or microlevel economic data including fiscal data. It happens to fall under the powers and responsibilities of the central government. It is placed under entry 31 & 96 of this list cover all the matters related to telecom and associated fees². As per Part XI described below the Parliament has exclusive powers to make laws with respect to any of the matters covered under Union list, which includes telecom. The central government also has the power to explore the

² Source: https://www.trai.gov.in/sites/default/files/Rec_Infrastructurel.pdf

space by building and sending satellites into space which have become a major vehicle for obtaining information.

1.11 In India's federal structure, different entries having a bearing on managing information and data are assigned to the different tiers of the government under the Seventh Schedule as given by Table 1.1.

Table 1:1: Subjects in the 7th Schedule of Constitution having a Bearing on Information

Union List

- **31.** Posts and telegraphs; telephones, wireless, broadcasting and other like forms of communication.
- **42.** Inter-State trade and commerce.
- **65.** Union agencies and institutions for...
- (b) the promotion of special studies or research; or
- (c) Scientific or technical assistance in the investigation or detection of crime.
- **68.** The Survey of India, the Geological, Botanical, Zoological and Anthropological Surveys of India; Meteorological organisations.
- 69. Census.
- **76.** Audit of the accounts of the Union and of the States.
- **94.** Inquiries, surveys and statistics for the purpose of any of the matters in this List.
- **97.** Any other matter not enumerated in List II or List III including any tax not mentioned in either of those Lists.

State List

- **12.** Libraries, museums and other similar institutions controlled or financed by the State; ancient and historical monuments and records other than those 4[declared by or under law made by Parliament] to be of national importance.
- **13.** Communications, that is to say, roads, bridges, ferries, and other means of communication not specified in List I; municipal tramways; ropeways; inland waterways and traffic thereon subject to the provisions of List I and List III with regard to such waterways; vehicles other than mechanically propelled vehicles.

Concurrent List

- 20. Economic and social planning.
- **2[25.** Education, including technical education, medical education and universities, subject to the provisions of entries 63, 64, 65 and 66 of List I; vocational and technical training of labour.]
- **30.** Vital statistics including registration of births and deaths.
- **39.** Newspapers, books and printing presses.
- **45.** Inquiries and statistics for the purposes of any of the matters specified in List II or List III
- **1[33.** Parliament may, by law, determine to what extent any of the rights conferred by this Part shall, in their application to,—
- ... (c) persons employed in any bureau or other organisation established by the State for purposes of intelligence or counter intelligence;

Source (Basic data): Constitution of India

1.12 The state and the local governments can play the role of gathering highly diffused field level information on their own and on behalf of the central government. The power for managing information has been largely vested with the central government mainly because of the economies of scale in managing fiscal statistics including 'Big Data' with fiscal implications. The use of this information for public purposes would be most efficiently served if this information is shared with the state and local governments. In our analysis of Big Data,

it is clearly seen that micro-level data and information can serve as a means to improving efficiency not only in collection of taxes and non-tax revenues but also in delivering publically provided services. These can play a vital role in the fields of health, education, security, law and order and social security.

- 1.13 The essence of federalism consists of cooperation, coordination and competition among the federating units namely, the central, state and local governments. The endeavour to cooperate, coordinate and compete should extend to the field of information as well. Sharing of data pertaining, for example, to inter-state transactions is essential for the success of GST requiring coordination among central and state governments. In fact, cooperation in sharing of information is vital not only for tax intelligence purposes but also for making public provision of public and merit services more effective. In capturing Big Data, states may even compete with each other to develop a more efficient approach to exploiting the potential of Big Data.
- 1.14 A major requirement in obtaining a comprehensive view of fiscal statistics in a federal set up requires not only accounts of individual governments but also their consolidated accounts at different levels of consolidation. In terms of the consolidated accounts, the following categories may be considered as relevant.
 - 1. State and UT level consolidated fiscal account of all PRIs
 - 2. State and UT level consolidated fiscal account of urban local bodies
 - 3. State and UT level consolidated fiscal account of all local bodies, rural and urban
 - 4. State and UT level consolidated fiscal account of state government and state level local bodies
 - 5. All India consolidated fiscal account of PRIs
 - 6. All India consolidated fiscal account of urban local bodies
 - 7. All India consolidated fiscal account of state governments and UTs
 - 8. All India consolidated fiscal account of state governments, UTs and local bodies
 - 9. Consolidated fiscal account of central government and UTs
 - 10. Consolidated fiscal account of central and state governments
 - 11. Consolidated fiscal account of central, states and UT governments
- 1.15 Out of these, consolidation is being done only with respect to the fiscal accounts of central and state governments. The practices being followed in these cases are also not uniform over time or across institutions.
- 1.16 Furthermore, to get an idea of the complete size of public sector intervention in the economy, government accounts at appropriate levels should also be integrated with public sector accounts. The regular government accounts include accounts of departmental enterprises but exclude non-departmental public sector enterprises. Thus, at least a few more consolidated accounts are needed such as the ones listed below.
 - 1. Consolidated account of central government including UTs and central public sector enterprises
 - 2. Consolidated state level account of state governments, state level local governments and state public enterprises
 - 3. Consolidated account of all state governments including all state level public enterprises
 - 4. Consolidated account of central government including UTs, state governments and central and state level public enterprises
- 1.17 Considering the present situation of fiscal account consolidation which is quite inadequate, it may at first appear a daunting task to produce and maintain, with regularity,

consolidated accounts at all the needed levels. However, without this, India's fiscal data system would remain quite inadequate and its policy use would remain considerably suboptimal.

Typical Structure of Government Accounts

The typical structure of government accounts consists of a receipt side and an expenditure side. In both cases, a distinction is made between the revenue account and the capital account. On the receipts side, on the revenue account, there are tax and non-tax revenues, and receipt of fiscal transfers in the form of grants and, if applicable, a share in the tax revenues of another tier. On the capital account, there are capital receipts in the form of borrowing, nondebt capital receipts and receipt from repayments on loans extended by the concerned government to other entities. Interest payments received on such loans are part of non-tax revenues and shown on the revenue side. Borrowing and lending provide internal dynamic interlinkages to the government accounts by relating transactions of one period to another. It gives rise to the concepts of liabilities and assets and the distinction between gross and net as also the distinction between stocks and flows. The accumulated borrowing that has not been repaid adds to government liabilities. On the expenditure side, on the revenue account, one classification of expenditure is with respect to general, social, and economic services. On the capital account, there are capital outlays and loans and advances that lead to creation of physical or financial assets. Assets and liabilities are stock variables whereas current revenues and expenditures pertaining to a given period are flow variables. Aggregate borrowing is in gross terms and when repayments are netted out, net borrowing is obtained. Chart 1.2 provides an outline of the typical structure of government accounts.

Receipts **Expenditures Balances Revenue Expenditure Capital Expenditure Revenue Deficit** Revenue Receipts: General **Capital Outlay** Tax revenues **Expenditures** (general, Non-tax revenues Interest payments social and Fiscal transfers Pensions economic Other gen. exp. expenditures) **Flows Fiscal Deficit Capital Receipts:** Social Net borrowing **Expenditures** (gross borrowing net of repayments) Non-debt receipts **Primary Deficit** Loans and **Advances Economic Expenditures** Liabilities Assets Stock **Physical and Financial** Stock of debt

Chart 1.2 Typical Structure of Government Accounts

Source: Prepared by FSC

1.19 Since there are two sides to the budget, namely the receipts and expenditure sides, government accounts requires balancing of the two sides. Not being in balance leads to typical concepts of deficits. Thus if revenue or current expenditure exceeds revenue receipts, there is a deficit on the revenue account. This revenue deficit must be financed by excess of capital

receipts over capital expenditures. Part of capital receipts may be in the form of borrowing. Further, any investment that cannot be financed by current revenues also needs to be financed by borrowing. Together net borrowing to finance either revenue deficit or capital expenditures comprise fiscal deficit. Net borrowing is equivalent to change in government debt. Fiscal deficit net of interest payments is called primary deficit.

- 1.20 Both revenue side variables and expenditure side variables can be classified in a variety of ways. Typically taxes are classified in terms of direct and indirect taxes or income and expenditure taxes. Expenditures are classified as revenue and capital expenditure or developmental and non-developmental expenditures. Until recently, these were also classified as plan and non-plan expenditures in India.
- 1.21 Since quite a number of definitions of fiscal variables and aggregates are involved, it is critical that the same definitions are used across different tiers of governments. Otherwise suitable and comparable aggregations do not become available.

Changes in Ground Conditions

1.22 In the context of assessing fiscal data management in India at the current juncture, a number of ground changes in the Indian economy have occurred in recent times that need to be taken into account for sound data keeping.

Abolition of Plan Non-Plan Distinction

1.23 First, following the recommendations of the FC 14, the distinction between plan and non-plan expenditures has been abolished. This was initiated by the central government but slowly state governments are also following suit. The related institution, namely the Planning Commission has also been abolished and replaced by the NITI Aayog at the central level. Slowly, the state governments are either abolishing the corresponding planning departments or redefining their roles.

Goods and Services Tax

1.24 Second, a major change in the field of taxation is the implementation of the Goods and Services Tax (GST). Correspondingly, a new body tasked with deliberating on GST matters with representation from the central government and each state government and UTs with legislatures, namely a GST Council has been set up. Another entity, namely, a GST Network (GSTN) has also been established through which significant amount of information relating to GST and its tax bases is flowing. It would cause a major change in the way fiscal data can be compiled and aggregated. This tax is highly information-intensive and the way it is implemented in India, any manual operations are almost ruled out. The GSTN platform serves as a comprehensive interface between the tax authorities and the taxpayers. It also serves as an information platform for input providers and input users.

Digital Technologies

1.25 Third, there has been a sea-change in the technology associated with data and information management with the onset of extensive digitization platforms. This revolution in information technology will have significant implications for fiscal data generation, compilation, storage, processing, exchange and analysis. With growing digitization, information can be sourced from websites associated with almost every department of the central and state governments. However, this information remains scattered and fragmented.

Fiscal statistics if properly organized and made accessible to the general public including researchers and international observers, can serve several key objectives.

Actual and Potential Users of Fiscal Data

- 1.26 A sound and reliable fiscal data system can make fiscal policymaking far more efficient. Fiscal policies are made not only annually at the budget time but there are also frequent intrafiscal year policy changes that occur. Both the annual policymaking and the frequent policy modifications within the fiscal year require well-informed inputs which may not only be departmental but also contributed by the general public, researchers and other stakeholders.
- 1.27 There are a number of direct stakeholders whose activities are linked to the availability of fiscal information. In this group, we may include all the actual and potential taxpayers and their populations may differ from tax to tax. These taxpayers would have interest in detailed information regarding tax rates and various other tax provisions as well as information on the population of taxpayers, registered dealers, exemptions, deductions, various notifications that come out from time to time etc. A second group of stakeholders relate to industry, service providers, banks, exporters and importers and such other economic agents who may be interested in the day to day evolution of fiscal policy and its broad aggregates including saving, investment, deficits, debt, tax revenues, non-tax revenues, sectoral government expenditures, working of the public sector etc. A third group of stakeholders are researchers and public policy observers including media. Their contributions lead to policy debates both prior to formulation of the fiscal policy and after it. These critical assessments of policymaking can potentially uplift the quality and efficacy of policy if these are based on reliable and up to date information.
- 1.28 Fiscal information can also serve to improve taxpayer compliance and reduce the related compliance costs. These compliance costs are a function of tax complexity as well as ease of transactions with revenue authorities. Digital platforms can be used to file returns and readily access them by taxpayers. This can also be used for giving information regarding errors and modifications in these returns, making this entire process low cost and seamless.
- 1.29 Governments at different levels are users of their own and each other's fiscal data. As a result, there is considerable amount of inter-departmental and intra-departmental exchange of fiscal information that is useful for the formulation of fiscal policies and for administrative purposes including tax administration. In addition, fiscal data is also used by different private players including companies and businesses, individuals including individual researchers and a variety of financial and non-financial institutions as inputs for their own commercial and strategic decisions.
- 1.30 The central and state governments have all subjected themselves to their respective fiscal responsibility legislations. This requires periodic assessment of their fiscal performance and imposes considerable demand on transparency in the way fiscal data are kept.
- 1.31 Utilization of fiscal data could be linked to different objective functions of each user where fiscal data would constitute a critical input. Governments themselves utilize this data for formulation of fiscal policy, for minimization of tax evasion as well as rationalization of tax structures. They may utilize fiscal data also for administering subsidies on delivering other publically provided services. Various institutions including the central bank and other banks utilize the fiscal data to formulate their own policies and their decision-making becomes better informed by the use of such data.

1.32 Clearly, all information including fiscal information has a link to the efficient working of an economy. When such data are available in a reliable and timely manner, the efficiency of the economy is expected to go up since the overall efficiency is a composite of efficiencies of governments, industries, institutions and individuals in their different capacities.

Managing Fiscal Data: Key Issues

1.33 During the course of deliberations of the FSC several issues were raised and discussed in regard to management of fiscal data in India. The key issues are summarized below.

Non-availability of Critical Data

- 1.34 Non-availability of critical fiscal data has been noted by the FSC as a significant issue. As noted earlier, consolidated accounts of governments at different levels of aggregations are simply not available. In the cases where these do become available, often long time lags are involved.
- 1.35 Government employment data and the related salary payment data often provide an incomplete and unreliable picture. Data on pay and allowances/ spending on payroll are not available on a timely and reliable basis. The amount of salary payments that is reported by the Centre, for example, under the head pay and allowances, is a gross underestimate. According to available information, even the data used in the Pay Commission's calculations was an estimate gathered from alternate sources. In this context, the constraints faced by the Seventh Pay Commission were particularly noted as a recent example.
- 1.36 A key issue relating to both direct and indirect tax statistics pertains to the publication of fiscal data. The Income Tax Department used to prepare a document called 'All India Income Tax Statistics' giving income tax collections as well as information on income tax base and number of assesses according to different rate categories. Although this document was prepared for departmental use, it was also accessible for the use of researchers. However, the compilation and publication of this document was discontinued in the early 90's. More recently, the CBDT published a set of data relating to such information for PIT and CIT as a one-time publication. This was soon after Thomas Piketty (author of Capital in the Twenty-First Century) had visited India and had lamented the lack of appropriately disaggregated direct tax data.
- 1.37 A much lamented non-availability of fiscal data pertains to local governments. The availability of these data is limited and discontinuous. There are hardly any compilations of local government consolidated fiscal accounts at the level of states. This matter is discussed in detail later in the Chapter.

Divergence/ Discrepancy in Data from Alternative Sources

- 1.38 An important issue pertained to the divergence/discrepancy in the same data for general government across different sources. Fiscal data are being compiled by the CAG, the CGA (for the Centre), and in the NAS (MOSPI) and data given by the central and state budgets. The Indian Public Finance Statistics (IPFS) that is published by the Ministry of Finance also provides a fiscal data compilation.
- 1.39 There is lack of transparency and consistency in regard to data on inter-governmental transactions such as inter-governmental grants. The amount given by the Centre as transfers is

not shown as the same as that received by the states in the respective accounts. The amount received by the states has not been equal to the share of transfers as prescribed by the FCs. There is ambiguity in the policy regarding the specific cesses and surcharges which the GoI collects, which reduces the sharable pool and ultimately the transfers received by the states. At the same time, cesses are often not used for the purpose for which these are collected.

1.40 Another aspect of non-transparency of fiscal data relates to the information on cost of collection. The cost of collection is determined by the CAG but the methodology for this is not disclosed and therefore it remains as an unknown amount. Although in the Union Budget, on the expenditure side, under fiscal services, there is an entry for cost of collection, but what is actually deducted from Centre's gross taxes is not known. The CAG, in its Report on Compliance of FRBM Act, 2003, published in 2016 (Report No. 27) made the following observation:

"During the certification of 'net proceeds' by the CAG, based on the recommendations of the successive Finance Commissions, it was noticed that during the period 1996-97 to 2014-15 an aggregated amount of INR 81,647.70 crore was short devolved to the States."

Distinction between Actual Fiscal Data vis-à-vis. Estimates

- 1.41 It has been noted that fiscal aggregates often consist of a mix of actual data and 'estimates'. The proportion of existing fiscal data that is actual and the proportion that pertain to 'estimates' differ. Many fiscal parameters such as deficits and debt are often measured as a ratio of GDP/ GSDP. Since most data provided by the CSO regarding the National Income Accounts are forward estimates, the process of reconciliation keeps continuing, thereby requiring multiple revisions to past years' GDP numbers, leading to several releases of revised estimates for GDP. This has an implication on fiscal variables which are measured as percentage of GDP. Therefore, there is a need to make a clear distinction between actuals and estimates which must be clarified in the concerned publication.
- 1.42 There is the related question whether the historical GDP data are estimates or actuals. The GDP numbers get finalized after undergoing 2 or 3 revisions and further revisions could only be due to changes in the base year, if any. In order to arrive at the finalized GDP numbers, the decision to stop further revisions to these numbers is purely administrative and therefore GDP numbers for the past years also continue to be estimates. Although, the final estimates for GDP numbers exist, but they still remain estimates. The presence of unorganized sector where firm data do not exist adds to this problem.

Classification Issues

- 1.43 Classification of expenditure into various categories such as developmental and non-developmental is also an issue. This classification scheme is maintained by the RBI. As per the Constitution, expenditure is to be classified into revenue and non-revenue, that is, capital. In India, until recently, government expenditures were classified as plan and non-plan expenditures.
- 1.44 The development revenue expenditure was net of plan grants to states. The RBI had maintained this classification as it was required for the netting out process in the calculation of general government's development and non-development revenue expenditure based on the

existing methodology of the RBI. Since plan grants are no longer in the Central budget for 2017-18, the non-plan grants were deducted from total grants and the residual so obtained was considered as plan grants. This was necessary because although the 2017-18 central budget had classified expenditure into only revenue and capital, the states continue to use the old classification of expenditure into plan and non-plan in their state budgets. The RBI is a mere recipient of such data and it was RBI's view that the fiscal authorities should take a call regarding this classification issue. In particular, the plan non-plan distinction should be given up in all government accounts.

- 1.45 Although the development non-development classification is an additional classification and the relevant revenue and capital expenditure could easily be derived even in the presence of such a classification. But such a classification could also be potentially misleading. This classification has been in vogue only as a convention. The definition of development expenditure as per the RBI is, "development expenditure is the expenditure on Social services, Economic services, non-Defence General services". It is not appropriate to consider, say, for e.g., expense on administration in defence services as non-developmental and the expense on administration in non-defence general services as developmental. There is a notion that development expenditure, as classified by an institution like RBI, indicates productive expenditure as opposed to non-development expenditure.
- 1.46 The FSC is of the view that there is a need to ensure that wherever relevant classification of budgetary heads or that of goods and services or tariff heads in the case of customs duties are used, there is a need to consider the corresponding international classification.

Cash based Vs. Accrual Accounting Based Data

1.47 An important difference in the way in which Indian fiscal data is kept as compared to a number of other countries arises due to cash-based as compared to accrual based accounting. Cash-based accounting offers scope for artificial or ad hoc postponement of expenditures or advanced collection of taxes requiring refunding it in future so as to meet required fiscal deficit or revenue deficit targets. It is difficult to draw a line between adjustments of this nature which may be spontaneous vis-à-vis. those which may be intentional. Countries like India that follow cash-based accounting for annual fiscal closures need to be particularly careful about transparency and reliability of their data.

Revenues caught up in legal disputes

1.48 At any point of time, large amount of tax revenues may be shown as due to the tax authorities but may actually be caught up in unresolved legal disputes. These may be shown as arrears but it may turn out that the claims of the tax department may be set aside by the judiciary. In these cases also, extra care needs to be exercised.

Transactions through Funds

1.49 Governments maintain a number of public accounts and often use these funds to camouflage the true nature of fiscal transactions. Thus, expenses may be charged to government treasury and the corresponding money may be transferred to a public account where it may be

simply lying as a balance but actual expenditure in terms of purchase of goods and services may not take place. Still in budgetary transactions, it will be shown as government expenditure.

Accounts of Autonomous Bodies

1.50 Sometimes funds are transferred to the bank accounts of autonomous bodies outside the state budgets. Bypassing the state budgets used to be a common practice for a number of centrally sponsored schemes including the Sarva Shikhsha Abhiyan whereby funds transferred to the bank accounts of autonomous bodies may lie there unspent but may be shown as expenditures in the central or state budgets. This matter was examined at length by the High Level Expert Committee (HLEC) on Efficient Management of Public Expenditure constituted by the Planning Commission. The Committee had submitted its report in July 2011.

Aggregation of Fiscal Data

1.51 Aggregation of fiscal data over the accounts of the central and subnational governments is required to obtain an idea of the overall government intervention in the economy. However, this aggregation requires netting out of intergovernmental flows so as to avoid double counting. Thus, a state may receive grants from the centre and pass it on to the local bodies leading to additional expenditures. The actual expenditure is done finally by the local body only but in the individual budgets of the centre as well as the state concerned, it will be shown as transfer to the subnational government. For the system as a whole, this would overstate government expenditures. There is a further difficulty in this netting out because often, until accounts are finally settled, there are differences between what a higher tier government may give and what may be shown as receipt by a lower tier of government.

Long Period Fiscal Data

1. 52 Researchers often identify and isolate long-term trends from shorter term cycles and seasonal movements. The analysis of long-term fiscal trends provide valuable insights regarding the underlying drivers of macro as well as fiscal trends. But, such long term trends cannot be identified unless long term series of fiscal data are made available on a comparable basis. Sometimes data series get broken because of changes in definitions and classifications. Sometimes an existing fiscal data series or set of series are simply discontinued. It is important to keep up long term comparable fiscal data series such as the one that is provided by the IPFS. Continuity of series and data structures are critical for economic and fiscal research of lasting value.

Time Lag Issues

1.53 Fiscal data are getting generated all the time. But their compilation, classification into suitable categories and eventual publication on a website or in printed form is replete with instances of heterogeneous time lags. These time lags may be different for different series within the central fiscal accounts and between centre and states and states and local bodies. These time lag issues often make data compilation incomplete or inconsistent. Actual compilation is usually postponed and the speed of compilation depends on the most delayed component of the fiscal data series. A modern digitized system of collection and compilation

should minimize issues relating to long and inconsistent time lags. In India, there is a noticeable heterogeneity in the timing of release of monthly fiscal data by the CGA and CAG for various state governments.

Deficit Measurement

- 1.54 Measuring general government deficit indicators is also an issue. Various terms are used such as gross fiscal deficit (GFD) and fiscal deficit (FD). The gross FD is not netted out for net lending. Fiscal deficit implies that it is netted out for net lending, which is defined by the RBI as loans and advances from Centre to States minus recovery of loans and advances from States. As per the RBI's definition, GFD is gross borrowing minus repayment of past borrowing while FD is gross borrowing minus repayment minus net lending. There is also an issue relating to whether or not the revenues from disinvestment should be considered as a part of receipts in the calculation of FD. It was indicated that in the methodology used by the IMF to calculate FD, revenues from disinvestment are excluded from receipts. Selling of assets means a reduction in the existing liabilities, affecting servicing of debt and eventually a reduction in the borrowing requirement. Terming fiscal deficit as GFD is a definitional issue which needs to be resolved.
- 1.55 For some years, the central government had introduced the concept of 'effective revenue deficit' where any deficit on the revenue account on account of expenditure that might ultimately lead to creation of a capital asset possibly at the subnational level was to be deducted. This concept has now been discontinued.

Non-standard templates

1.56 There are significant issues regarding the methodology used for compilation of data for the Centre and states. Moreover, there are also significant conceptual issues also. There is also the bigger issue of not being able to capture and appropriately aggregate granular data which is getting generated by the IT-enabled institutions. It should be a mandate for the states to report their budgetary data in a standard template, which could be the same as that used by the Centre. Templates should be similar at different levels of government for uniformity, comparability and aggregation.

Data for local bodies

1.57 A major deficiency of India's fiscal data system relates to finances of the local governments. One of the recommendations of the FC 13 was that a simple schedule for collecting data on current and capital receipts and expenditure at the local level be prepared. But in recent year considerable gaps have appeared in the collection of data of local bodies. According to available information at the time when the Fiscal Statistics Committee held these discussions, it was indicated by the CSO, which uses this data in the NAS compilation, that fiscal data for local bodies could be gathered only for only about 11 states, and even that was with gaps and deficiencies. One of the main challenges is that there is no uniformity in reporting data at the local level. Secondly, there is still no availability of the soft version (electronic format) of consolidated demand for grants by the local and autonomous bodies. First, it needs to be decided as to how comprehensive the coverage should be, in terms of the fiscal data for local and autonomous bodies and second, there is a need to examine the issue of non-availability

of electronic version of the local government accounts. The RBI had earlier attempted to conduct a study and compile data for municipal finances. But data at that level were also not available.

Inter-face of Fiscal and Macro-economic data

1.58 There is a close relationship between fiscal data and macro-economic data. Fiscal data constitute a key ingredient of macro-economic data. Formulation of fiscal policy is critical to the formulation of macro-economic policy. Fiscal data are themselves presented in two forms or classifications: functional and economic. In the economic classification, fiscal data are arranged in the form of consumption and investment expenditure, etc. that are part of the macro-economic aggregates in the economy. Government expenditures and revenues represent an important component of the macro-economy. Inflation, interest rate, and other important macro variables have a direct influence on fiscal aggregates and *vice versa*. Often fiscal variables are measured in relation to GDP/ GSDP at current prices. Transformation of budgetary classification into economic classification often involves considerable time lags.

Keeping Pace with Global best practices

- 1.59 Countries around the world, at different stages of development of their fiscal policies and procedures, are increasingly accessing more data and information from various agencies domestically as well as internationally by entering into international agreements. This is particularly important in the context of tax data. As the regulatory environment and corporate governance grow stronger in many countries, tax administrations seek to leverage filings and reporting, such as public financial statements and customs or trade regulators' data. Increased data from a variety of sources and the increased use of electronic filing of returns would progressively facilitate tax administrations' ability to perform data analysis and risk assessment. Business structures and transactions have become complex. This has necessitated the exchange of data or information which requires setting up of common standards and taxonomy, instituting secured protocols for data and information storage, access and disposal, and networks for exchange which are secure and cannot be breached.
- 1.60 A recent IMF Working Paper (WP/18/175; 'Using Administrative Data to Enhance Policymaking in Developing Countries: Tax Data and the National Accounts', Lisbeth Rivas and Joe Crowley, 2018, p. 15) observes: "Countries at different levels of development have successfully included administrative data in their statistical frameworks. Canada, Chile, Denmark, Finland, Guatemala, Pacific Island countries, Rwanda, Uganda, and the United Kingdom are examples of countries that use VAT and income tax records in compiling their monthly indices of economic activity, quarterly national accounts, annual GDP, and business registers. This has replaced business surveys, thus reducing the reporting burden and data collection costs associated with compiling their national accounts."

Summary and Recommendations

1.61 Fiscal data relate to accounts of the government. A typical government account is divided into two sides namely receipts and expenditures. The balance of these is captured by accounts of deficit. Since India has a three-tier system of governance, there are more than 2.67 lakh governments. Apart from individual government accounts, their consolidated accounts at

different levels of aggregations are also needed. Further, reliable data on intergovernmental flow of resources and expenditures are also required. Much of this data is not readily available.

1.62 There has been some important changes in the ground conditions in India affecting the management of fiscal data. In particular, we may take note of the abolition of plan non-plan distinction, the implementation of GST, and the extensive spread of digital platforms to capture data including fiscal data.

The fiscal data system in India suffers from various deficiencies. Some of these may be listed as:

- 1. Non-availability of critical fiscal data such as the data on pay and allowances
- 2. Divergence/ Discrepancy in data from alternative sources
- 3. Absence of distinction between actual fiscal data vis-à-vis. Estimates
- 4. Classification issues particularly on the expenditure side
- 5. Lack of transparency and reliability of fiscal data due to cash based accounting
- 6. Large amounts of tax revenues caught up in legal disputes
- 7. Transactions through different Funds
- 8. Issues with the accounts of autonomous bodies
- 9. Absence of accurate aggregation of fiscal data at different levels of the government
- 10. Lack of continuous long term series of fiscal data
- 11. Time lag issues
- 12. Issues in deficit measurement
- 13. Non-standard templates at different levels of the government
- 14. Lack of comprehensive and timely data for local bodies
- 1.63 Fiscal data should be considered as a public good. It has the characteristics of being both a consumption good and investment good. It provides information that can directly be of value or utility in understanding the working of the governments and their departments. It can also serve as inputs to policymakers, economists and researchers whose work may improve the efficiency of policymaking. It can also facilitate purchase and supply decisions of private firms and investment and credit decisions of banks and financial institutions as well as exporters and importers. Thus, it can uplift the efficiency of the overall economy and lead to welfare improving outcomes. For playing this role, fiscal data should be made freely available for common use.
- 1.64 India's fiscal data system should be developed in the framework of 'information' federalism wherein cooperation, coordination and competition among the different tiers of federal governance would build up a modern state-of-the-art fiscal data system. This would require considerable investment of resources.
- 1.65 There is a need for preparing consolidated accounts of the public sector, the central government, the state governments and the local governments. Such consolidation is required at different levels. This exercise should be undertaken at the central or an apex level and a suitable institutional mechanism requires to be set up for this purpose. The concept of a Fiscal Council has been discussed subsequently in this Report. The Fiscal Council can also be entrusted with the task of preparing these consolidated statements in coordination with the CAG, the CGA, the central and state governments and the RBI.

2. Sources of Fiscal Statistics: Aggregation and Coordination

- 2.1 It is useful to recognize the distinction between primary and/ or micro-level fiscal statistics and their aggregation into secondary and/ or macro-level fiscal data such as budgetary data. Most economic activities of individuals are likely to contain an element of fiscal data. Transactions relating to purchases of goods and services involve some element of central and state taxes. These related prices may also contain, in some cases, government provided subsidies. Similarly income and wages earned and paid may have relevance for income tax payments. Government expenditures resulting into publically provided goods and services as well as subsidies may be affecting prices in the economy. Individual transactions of imports and exports of goods and services would have implications for import duties and domestic indirect taxes including the GST. In the case of taxes, micro data may be getting generated through the filing of returns at different frequencies for different types of taxpayers and through the payment of taxes particularly advance taxes and the payment of refunds by the concerned departments at different times within the fiscal year.
- 2.2 In the context of granular data and 'Big Data' analytics, discussed in detail in Chapter 6, primary data, after appropriate anonymization, may be directly used for analysis. It offers tremendous potential for getting valuable analytical and policy insights using modern data processing and information technology tools. Generation of fiscal data usually involves four steps: anonymization, compilation, aggregation and verification. These are discussed in the subsequent sections of this Chapter.

Sources of Fiscal Data

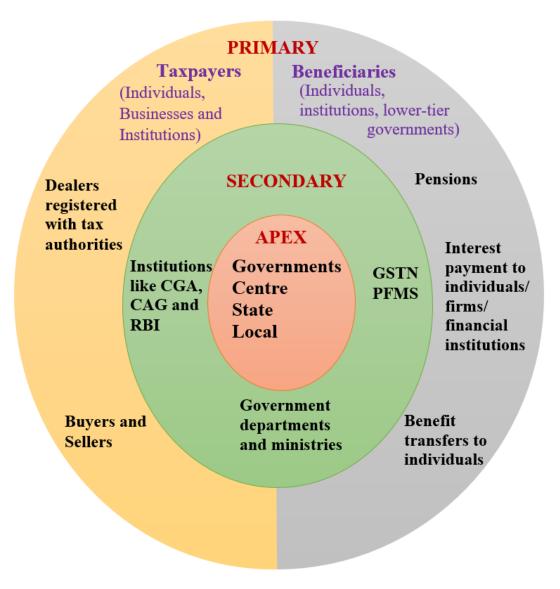
2.3 Fiscal statistics are provided by a large number of stakeholders in the fiscal system. These can be grouped as (a) primary fiscal data providers, (b) secondary fiscal data providers and (c) third party sources.

Primary Data Sources

2.4 Primary fiscal data sources consist of the body of taxpayers who may be individuals, firms and businesses, financial and other institutions, and public sector enterprises as well as government departments. Generally these taxpayers would be registered with one or more tax authorities of the central and the state governments. In fact, indirect taxes are paid in all taxable transactions where buying and selling are involved. As purchasers and consumers of goods and services, every citizen becomes a source of primary fiscal data. In each completed transaction, there may be a tax payment involved. This tax payment is collected by the seller and then the collected taxes are deposited with the tax authorities. The seller is likely to be a registered dealer with some tax authority and he plays the role of a revenue collection agent of the government. Such fiscal data are primary in nature and have remained highly diffused until the availability of large digital platforms where they may be accessed and utilized as long as the transactions involve payment through some formal financial mechanism. We may consider the entire universe of taxpayers including the registered dealers and assessees with different tax authorities as part of the universe of primary sources. Similarly, with respect to direct purchases of publically provided goods from the governments/ departments, fiscal information is

involved, leading to generation of non-tax revenues. Non-tax revenues are generated through payments of fees and penalties and other charges. These are also generated through access to rights to use of assets owned by the governments such as the minerals and spectrum. All license holders who make use of these rights are part of the universe of primary fiscal data sources.

Chart 2.1 Universe of Fiscal Data Sources



Source: Prepared by the FSC

Secondary and Apex Level

- 2.5 The data submitted by registered dealers and assessees are compiled by the concerned departments. This compilation is facilitated because most data are according to prescribed formats. These may be aggregated according to the relevant subject at the departmental level. All of these departments can be considered as the secondary level data aggregators.
- 2.6 The concerned Ministry/ Department of Finance compiles departmental data into broader categories of expenditures and revenues. These then become inputs to the formulation of Budgets. Similar operations happen on the expenditure side. At the apex level, we may

consider all the governments at the central, state and UT, and local levels who are the ultimate owners of these data. At the apex level, Budgets are presented, discussed and approved. According to approved heads, different demand for grants are sanctioned which authorize undertaking of expenditures. These expenditures are undertaken at the secondary level and the beneficiaries of these expenditures and recipients of any direct payment from the government whether in the form of interest payments, pensions, wages and salaries, subsidies or payments for purchases of goods and services undertaken by the government departments, are diffused throughout the economy. Thus, the universe of fiscal data sources is quite vast. Without an extensive IT network, such large and extensive database was not getting regularly captured. Most discussions on fiscal policy remained confined to discussions around the Budget based on annual data. However, over time, access to granular and diffused data have opened up multiple possibilities for utilizing this vast information network.

Third Party Sources

- 2.7 Modern digital platforms have also provided access to third party information sources which may have fiscal implications. In the context of tax intelligence work, in many countries, third party sources of information using platforms such as the Facebook, Twitter and other social media platforms, tax authorities try to build up a profile of the current and potential taxpayers. Most economic activities such as travels undertaken, major assets purchased, marriages being organized, social functions being held may all carry third party information which may contain information about the potential tax base or about the impact of government's fiscal policies.
- 2.8 It is thus clear that the universe of fiscal data sources is as large as the society itself. It is fortunate that such a large database can be accessed, analysed and made use of for different kinds of analytics and for policymaking with the help of modern IT facilities. Such data can even be used for decisions undertaken by private entities to undertake informed firm-level and individual-level private decisions regarding sales and purchases and other economic activities. Chart 2.1 provides a picture of the universe of providers of fiscal statistics.

Processing of Fiscal Data

2.9 There are four key steps in processing fiscal statistics until it reaches the usually visible form as budgetary data of governments at different levels. These stages may be referred to as (a) Anonymization, (b) Compilation, (c) Aggregation, and (d) Verification.

Anonymization

2.10 Although governments may have access to extensive personal information of various purchases made and incomes and profits earned, based on information on transactions and various returns filed by individuals including non-individual legal entities, their compilation and aggregation can be done into useful fiscal aggregates by first anonymizing these. Anonymization preserves the privacy of the individual. It makes data sharable both at a micro and macro levels. Aggregation of micro-data into broader homogenous categories is usually done with respect to anonymized data.

Compilation

2.11 Compilation usually involves capturing of micro-level and primary data pertaining to individuals or individual transactions through specified formats including periodic returns submitted by individual entities. Compilation prepares the primary data for direct analysis and for aggregation. In the compilation of fiscal data from sources such as the GSTN, anonymization has become a critical step. Important places where micro-level fiscal data are compiled into suitable formats mainly consist of government departments at all levels of government or approved authorities such as the GSTN. Compilation requires development and upkeep of suitable formats.

Aggregation

- 2.12 Aggregation can be considered at three levels: space including levels of government, time and categories. The transactional data are getting generated at all points of time. Fiscal data makes sense when these are compiled into suitable aggregates and presented at suitable time frequency. The relevant aggregates are often defined in terms of relevant categories such as tax and non-tax revenues, revenue and capital expenditures.
- 2.13 The processes of anonymization and aggregation together convert private data containing fiscal information from a private good to a public good which is meant for common use. Since such data are publically provided, it is taken for granted that these data have been cleaned up, cross-checked and verified and are reliable. Aggregation over space also implies aggregation to cover different levels of government and their consolidated accounts. Aggregation can be for local, state, and the central governments and according to monthly, quarterly and annual aggregates. Uniform definitions and classifications are critical for aggregation and subsequently, analysis of this data. For the economy as a whole, the overall government intervention in terms of direct purchases of goods and services is a critical input for government policy making.
- 2.14 Important sets of aggregated fiscal data include flows into and out of various funds of the respective governments including the Consolidated and Contingent Funds as well as the numerous public accounts both at the central and the state level including the National Small Saving Fund (NSSF). There are also significant receipts from non-tax sources which are aggregated into suitable categories. Similarly, pension data is available from the Central Pension Accounting Office (CPAO). Suitable data could also be sourced from the Department of Public Investment and Asset Management.
- 2.15 Aggregation of the revenue, expenditure and capital receipts data for all three tiers of the government (which could be extended to public sector and departmental enterprises) at an annual, quarterly and monthly frequency is a vital step in fiscal data compilation. Thus, as far as the central government budgetary transactions are concerned, the CGA compiles data on revenue receipt and expenditures at a monthly frequency. These data capture all critical dimensions of central government fiscal operations in terms of receipts, expenditures and borrowing. Other important institutions that play the role of fiscal data aggregators are the CAG, CGA, RBI and CSO.

Verification

- 2.16 The constitutionally approved process of verification of government accounts is audit. The CAG has the constitutional authority to audit the central and state government accounts. The local governments constitutionally derive their powers from the state governments and since these are autonomous bodies but extensions of the state governments, the CAG has the authority to audit all government accounts. The CAG also has the authority to audit all public sector accounts. State level AGs are part of the office of the CAG. They have the responsibility of auditing the state and local government accounts. In governments dealing with public sector entities as also departmental accounts, there is a difficulty that the accounts of public sector enterprises are not finalized according to due dates, making compilations difficult or subject to frequent revisions.
- 2.17 Auditing, in fact, is a two-stage process. First, internal audits are arranged for the departmental accounts and for the accounts of the public sector enterprises. The audit of the CAG comes as an apex level of auditing and verification.

Primary Data (micro level)

Non-tax revenue

Expenditures

1. Payments for Services, fines and penalties
2. Payments for Property rights (minerals, spectrum, land leases, government properties etc.,) by licensees to government

Primary Data (micro level)

Expenditures

1. Payments (salaries, interest and pensions)
2. Transfers and subsidies (Grants to other governments, direct beneficiary payments)

Anonymization and Compilation

Proformas, Prescribed formats

Aggregation

By types of revenues and expenditures

By time/frequency (monthly, quarterly, annual)

By level of Government (Local, State and Central, UT)

Chart 2.2 Transformation of Primary Micro-level Fiscal Data to Fiscal Aggregates

Verification

Audit: Internal and external by approved authorities

Source: Prepared by FSC

- 2.18 Verification is also a two-step process in the sense that the auditing is required first to verify whether an expenditure shown as expenditure has actually been incurred and second, whether it has been incurred in line with the purpose which was approved by the concerned legislature or Parliament or any other approving authority. Similarly, on the revenue side, claims made on account of exemptions and deductions need to be verified to ensure that these meet the conditions of the approved provisions regarding exemptions and deductions etc.
- 2.19 If certain irregularities are identified by the concerned audit officials, the related objections are raised through audit paras. Subsequently, the concerned departmental/ public sector authorities attempt to reconcile the differences with the audit authorities. Some audit paras are then removed or modified but there are others that may remain unresolved. In this sense, sometimes, finally verified and approved fiscal statistics after due audit may never become available. In any case, the finalized version of government accounts become available only after considerable revisions involving substantial time lags.
- 2.20 The above-mentioned steps involved in the transformation of primary micro-level fiscal data to fiscal aggregates are depicted in Chart 2.2.

Aggregation according to Time

Annual Data

2.21 A cross-check and reconciliation happens at an annual frequency when the central government's Annual Financial Statement (the Budget) is prepared by the Ministry/ Department of Finance. The same process happens through CAG's state level offices for state governments' budgetary operations. These data are consolidated to give an annual consolidated picture of the operations of the central and state governments after reconciling the differences in definitions and reporting practices and taking into account inter-governmental flows.

Monthly Data

2.22 The CGA publishes fiscal data on a monthly basis for the central government for a selected set of aggregated series. State level AGs publish state level monthly fiscal data although availability of such data across states at the same time remain heterogeneous. There is a clear challenge in obtaining and aggregating revenue and expenditure data on a monthly basis for the state and local governments. Monthly data on revenue and expenditure of the state governments is published by the CAG, although comparability of data may still be an issue. In any case, month-wise consolidation of fiscal data for all states is not being done.

Quarterly data

2.23 Quarterly fiscal data is of special relevance since a number of other macro variables including National Income data and data regarding other key economic aggregates relating to money supply, current account deficit etc. are also available on a quarterly basis. This facilitates formulation of macroeconomic policy interventions at quarterly intervals. Monetary policy is already being made at key defined periodic intervals. Quarterly fiscal data can be obtained by aggregating individual monthly series wherever relevant.

Fiscal Data as Public Good

- 2.24 Information/ Statistics provides a rare example where a private good is transformed first into a merit good with large positive externalities and finally to a public good as the processes of anonymization, compilation and aggregation take place.
- 2.25 In 2014 a UN resolution laid down 10 fundamental principles for official statistics. The first is 'Official statistics provide an indispensable element of the information system of a democratic society, serving the government, the economy, and the public with data about the economic, demographic, social, and environmental situation. To this end, official statistics that meet the test of practical utility are to be compiled and made available on an impartial basis by official statistical agencies to honour citizens. The other fundamental principles relate to methods and procedures, scientific standards, proper interpretation, all sources of data, confidentiality, rules and regulations, coordination, use of international concepts, and cooperation.'
- 2.26 In this process, to the extent that information remains individualized and private, there can be some cost recovery for meeting the large resources required by the public authorities in a country to meet the heavy costs of building a modern and effective information system. There is already considerable commercial use of Big Data that is accessed by private players who use it for getting a better reach for commercial advertisements, product innovations, investment decisions and sales etc. Public authorities have access to much larger volume of Big Data. As long as it is individualized and private subject to regulations, the public authorities may also utilize some of the valuable information that they have for cost recoveries. Thus, information gathered from satellites about weather patterns, location of fish, location of underground resources etc. can be used for commercial purposes. However, when information becomes a public good, it should be freely shared with all tiers of government and private entities for the maximum impact on improving the efficiency of the economy.

Sources of Fiscal Data: Key Institutions

2.27 A number of important institutions are involved in compiling and publishing aggregated fiscal data. Although fiscal data pertain to the governments, many entities other that governments and many agencies within the governments are involved in generating, compiling, keeping and aggregating fiscal data. Some of the key institutions playing this role are briefly described below.

Central Government

2.28 Centre's fiscal data are spread over time and space. Keeping track of all the data generating sources, and flows and stocks that emanate from these, is critical for fiscal data compilation. The principal source of Centre's fiscal data are the ministries and departments of the central government. The Ministry of Finance maintains a website to share with the public, important fiscal information regarding the central government. Among government departments, compilation of tax statistics is of vital importance. Taxes constitute withdrawal of money from private circulation and deposit of money into government accounts. High frequency tax account data is useful for macroeconomic policy calibration since it affects overall spending and disposable incomes. It also has implications for cash flow management for the central and state governments.

2.29 The fiscal data presented in the budget cover budget estimates (BE) for the next fiscal year, revised estimates (RE) for the current fiscal year and final account figures (un-audited) for the previous year. The budget documents also provide time series data on select fiscal variables.

Comptroller and Auditor General of India (CAG)

- 2.30 The CAG derives its authority from Article 149 of the Constitution. The CAG is responsible for the following:
 - a. Compilation of accounts of each and every State of the Union with those initial and subsidiary accounts which are given to the audit and accounting offices under its control by the treasures, offices or departments responsible for keeping such accounts; And
 - b. Keeping such accounts in relation to any of the subjects specified in clause (a) which are necessary
- 2.31 The CAG is also the external auditor of Government owned corporations. It conducts supplementary audit of government companies, i.e., any non-banking/ non-insurance company in which Union Government has an equity share of at least 51 per cent or subsidiary companies of existing government companies. The reports of the CAG are considered by the Public Accounts Committee and the Committee on Public Undertakings.
- 2.32 For example, the CAG in its Financial Audit of the Accounts of the Union Government for the year 2016-17 (Report No. 44 of 2017) made the following observation indicating some of the key shortcomings of the way centre's fiscal data are scrutinised, requiring further checks and reconciliation.

"Opaqueness was noticed in 35 Major Heads relating to expenditure and receipts wherein more than 50 per cent of total expenditure and receipts under these heads were recorded under minor head 800-Other Expenditure/Other Receipts. (Para 2.2.1)

Fourteen regulatory bodies and autonomous bodies which also act as regulators in their respective field, had retained funds generated through fee charges, unspent grants received from Government of India, interest accrued on Government grants, receipt of license fees, corpus fund, etc. aggregating to INR 6,064.08 crore at the end of March 2017, outside the Government Account, contrary to the instructions issued by the Ministry of Finance in January 2005. (Para 2.2.2-a)

Research and Development Cess aggregating to INR 7,885.54 crore was collected during the period 1996-97 to 2016-17. Out of this, only INR 609.46 crore (7.73 per cent) was utilized towards the objectives of levying the said Cess. (Para 2.3.1)

Against the total collection of INR 83,497 crore as Secondary and Higher Education Cess (SHEC) in the Consolidated Fund of India during 2006-07 to 2016-17, no amount could be transferred to the earmarked fund in Public Account as neither the schemes were identified on which the cess proceeds were to be spent nor the designated fund was opened in the Public Account to deposit the proceeds of SHEC. (Para 2.3.3)"

Reserve Bank of India (RBI)

- 2.33 The RBI compiles and publishes general Government fiscal data, including debt, derived from the budget documents of the Central Government and State Governments. The data disseminated by the RBI may be linked as follows:
 - a. The accounts of Central Government are analysed and published as an article on Central Government Finances in the RBI Monthly Bulletin within a period of two months after the presentation of Union Budget.
 - b. The accounts of the State Governments and NCT Delhi and Puducherry are compiled, analysed and published as a comprehensive Study on Finances of State Governments. While earlier there used to be a lag of 6 to 7 months in the release of this Study after the presentation of the State budgets, beginning July 2018, the Reserve Bank has eliminated the lag in data availability by releasing the study few days after the last State Budget was presented. The latest issue of the Report thus, covers developments right up to budget estimates for 2018-19.
 - c. The accounts of the Central Government and State governments along with the NCT Delhi are consolidated into Combined General Government Fiscal Data and published in the RBI Annual Report and Handbook of Statistics on Indian Economy. The data disseminated by the RBI through its publication and web portal 'Database on Indian Economy' also include details on central and state government market borrowings, net RBI credit to Government, outstanding liabilities and explicit guarantees of both Centre and State Governments.
 - d. Reserve Bank also compiles the Consolidated General Government Fiscal Data for the purpose of the Special Data Dissemination Standards (SDDS) of the International Monetary Fund. The data are disseminated through the RBI website and published in the RBI Monthly Bulletin.
- 2.34 Apart from annual data, the RBI is also a source of high-frequency economic data including fiscal data. It provides online access to data available at different time frequencies including weekly, fortnightly, monthly, quarterly, and annual data.
- 2.35 The Reserve Bank of India Act, 1934 requires the Central Government to entrust the Reserve Bank with all its money, remittance, exchange and banking transactions in India. The Government also deposits its cash balances with the Reserve Bank. The Reserve Bank may also, by agreement, act as the banker and debt manager to State Governments. Currently, the Reserve Bank acts as banker to all the State Governments in India (including Union Territory of Puducherry), except Sikkim. For Sikkim, it has limited agreement for management of its public debt.
- 2.36 State level borrowing is managed by the RBI. To formulate the borrowing programme for the year, a number of factors are taken into account, such as, the amount of Central and State loans maturing during the year, the estimated available resources, market appetite and the absorptive capacity of the market. The Reserve Bank also acts a cash manager to the central and the State governments. For cash management as also for liquidity management purposes, flows or changes in the Central Governments' cash balances are monitored and projected based on history and experience.

- 2.37 The Reserve Bank has well defined obligations and provides several banking services to the governments. As a banker to the Government, the Reserve Bank receives and pays money on behalf of the various Government departments. The Reserve Bank also undertakes to float loans and manage them on behalf of the Governments. It provides Ways and Means Advances (WMAs) and Overdraft facility which are short-term interest bearing advances to the Governments to meet temporary mismatches in their receipts and payments. Besides, like a portfolio manager, the RBI also arranges for investments of surplus cash balances of the Governments. The Reserve Bank acts as adviser to Government, whenever called upon to do so, on monetary and banking related matters.
- 2.38 Under the administrative arrangements, the Central Government is required to maintain a minimum cash balance with the Reserve Bank. Currently, this amount is Rs.10 crore on a daily basis and Rs.100 crore on Fridays, as also at the annual account closing day of the Centre and the Reserve Bank (end of March and June). Under a scheme introduced in 1976, every ministry and department of the Central Government has been allotted a specific public sector bank for handling its transactions. Hence, the Reserve Bank does not handle government's day-to-day transactions as before, except where it has been nominated as banker to a particular ministry or department. As banker to the Government, the Reserve Bank works out the overall funds position and sends daily advice showing the balances in its books, Ways and Means Advances granted to the government and investments made from the surplus fund. The daily advices are followed up with monthly statements.
- 2.39 The Reserve Bank of India (RBI) is responsible for the overall supervision of the financial sector comprising commercial banks, financial institutions and non-banking finance companies (NBFCs). The functions of the RBI include regulation and supervision of banking and non-banking financial institutions, including credit information of companies and regulation of money, forex and government securities markets as well as certain financial derivatives. RBI also acts as the banker to banks and to the central and state governments. The RBI is responsible for the oversight of the payment and settlement systems, currency management and research and statistics. Both the CBDT and the CBIC exchange data or information with the RBI and other banks on a regular basis. For example, data on all foreign remittances are routed electronically through the RBI to the IT department for verification of TDS payment (if leviable) on such transactions. Similarly, data on foreign remittances or export proceeds are transmitted from the RBI to the customs department in the form of bank realisation certificates.

Central Statistical Organization (CSO)

- 2.40 The CSO compiles fiscal data in a manner such that these become part of the National Income Accounts. Since National Income Accounts require consideration of the consolidated fiscal accounts of central and state governments and to an extent local governments, the CSO presents estimates of the National Income equivalents in terms of aggregates such as government consumption expenditure, government investment expenditure etc. In fact, CSO compiles Public Sector Accounts data and also integrates these with the government accounts to provide a broader picture of the Public Sector Accounts.
- 2.41 CSO's Public Sector Accounts provide a set of classifications which are comparable but are different from the budgetary aggregates. CSO provides selected quarterly data also but its

annual publications give details of public sector transactions classified into suitable economic categories.

State Governments

AGs at State Level

- 2.42 Individual departments within the state government may keep their accounts which are consolidated by the Department of Finance and the state governments. These accounts remain estimates at different stages such as BE and RE until these are audited and Final Accounts become available after resolving any issues that may have arisen due to audit objections.
- 2.43 The accounts of each state government are audited by the state level Accountant General who are all part of the Office of the CAG. State level AGs also publish Monthly Accounts of taxes, non-tax revenues and expenditures undertaken by the concerned state governments. In most cases, these are available online and can be used to compile an aggregate monthly picture of state finances.

Local Bodies

- 2.44 The entire set of local governments constitute their own primary source of fiscal information. The fiscal data pertaining to local Governments are not systematically codified nor presented as the budgetary operations of local Governments are generally subsumed in the States' or Central budgets. The database relating to the local authorities for the requirement of the national accounts statistics needs to be strengthened.
- 2.45 Local bodies are supposed to maintain their budgetary accounts in suitable formats. The budgetary accounts of local governments are not being compiled in a satisfactory way or being aggregated to provide the picture of local government budgetary operations for the state as a whole. There are classification related issues as well as issues in getting audited accounts. The Finance Commissions (FCs) have been recommending from time to time about the need for uniformity in maintaining local government accounts in suitable ways. However the progress in this regard has been limited.
- 2.46 The CAG is also the authority for auditing the local government accounts. The CAG had at one time prepared, relatively uniform format for keeping local government accounts in different states. However, one of the basic deficiencies in managing India's fiscal data system is the non-availability of audited local government accounts pertaining to many years.

Public Sector Accounts

2.47 The duties of the Comptroller and Auditor General extend to audit of Government companies and corporations and bodies and authorities in accordance with the laws made by the legislature. The public sector undertakings are of three types namely, Government departments engaged in commercial activities such as the Railways, Corporations created under Acts of Parliament or the State Legislatures and companies having majority shareholding by the Government. In addition, there are societies promoted by government that function under separate laws applicable to them.

- 2.48 Estimates of the internal and extra budgetary resources (IEBR) of the Central Public Sector Enterprises are made available in the budget documents but the accounts data are not being published. Unlike the General Government, these Public Sector undertakings are not constitutionally bound to present their Annual Financial Statement, although the CAG makes an annual scrutiny of their accounts. The financial statements of these undertakings are finalised with varying time lags.
- 2.49 The details on the financial position of Public Sector Enterprises both at the Central and State levels are made available with considerable time lag. Financial results of commercial undertakings like Posts and Telecommunication, etc. at the Central level are limited to the extent of those available in the budget documents. The Railway finances used to be available, in detail, separately in the Railway Budget. Now these are merged with the general Budget. Different public sector enterprises are themselves the primary sources of information as they have to keep their accounts and get these duly audited.

Inter-governmental Fiscal Flows

- 2.50 Under the Constitution, the central government has been authorized to raise relatively larger revenues in relation to its needs and the excess that arises is meant to be transferred to the subnational governments in the form of tax revenue sharing and grants under the recommendations of the FCs that are set up from time to time. Intergovernmental fiscal flows are in the following forms:
 - a. Share in central taxes
 - b. Grants under Article 275 of the Constitution
 - c. Grants under Article 282 of the Constitution
 - d. On-lending of borrowing from the central to the state governments including external assistance
- 2.51 The FC is a constitutional authority which periodically provides specialized fiscal data in relation to central, state and local governments. This data generally provides comparability across states so that various inter-state parameters can be estimated. The FC provides an assessment of the state of finances in the country, generally at five-yearly intervals. As an institution, it is one of the most important user and provider of fiscal data. Since it is not a permanent body, it has to spend considerable time after it is constituted to compile a vast array of fiscal and macroeconomic data on a comparable basis. Its working may become far more efficient if such data were to be kept in a format which is readily available to the FC as and when it is constituted. Similarly a significant amount of fiscal data remains unused or underutilized after the Commission winds up its work because the compiled series are not continued to provide an unbroken fiscal perspective.
- 2.52 Since states are indebted to the central government, having borrowed from it in the past, they have to service this debt in the form of interest payments and repayments. These also constitute intergovernmental fiscal flows. Since resources flow out from one tier of government to another tier of government, consistency of data of these intergovernmental fiscal flows is of considerable importance. It is expected that if there are any data differences between what is transferred and what is received, over time, these would be reconciled. In practice however, these reconciliations may take a long time.

- 2.53 Another important issue in relation to intergovernmental fiscal flows pertains to preparation of consolidated accounts of central and state governments, state and local governments and central, state and local governments (*See Chapter 1*). In preparing these consolidated accounts, these intergovernmental fiscal flows need to be netted out.
- 2.54 Intergovernmental transfers and inter-fund transfers are critical to compilation of fiscal statistics. The main channels of such transfers are from central to state governments and state to local governments and vice-versa. From central to state governments, payments are made through three channels, (a) states' share in central taxes, (b) grants of various kinds given by the central government to the state governments, and (c) on-lending by the central government which may borrow on behalf of the state governments in the domestic market or through NSSF and from multilateral and bilateral lenders who lend through the central government to the state governments. A reverse flow is involved from the lower to the higher tier of governments when debt servicing in the form of repayment and interest payment is undertaken by the local and state governments.
- 2.55 Compilation of high frequency data on borrowing and debt servicing is presently not available but three institutions which are involved in this process namely, Government Debt Office, the RBI and CAG do have the information and can develop the necessary strategy for compilation and aggregation.
- 2.56 Interest payment data also stand on a footing distinct from other expenditure aggregates in government's budget. The dynamics of its growth also differs from other budgetary data. In particular, interest payment flows depend on (a) existing stock of debt for which disaggregated data would be available, (b) the term structure of interest rate and repayment profile, and (c) increment to debt based on borrowing rules. As such, the forecasting framework for interest payments can be built in a different way compared to other budgetary aggregates. Interest payments involve intergovernmental flows and provide an opportunity for consistency checks. Thus, central government receives interest payments from state governments and such payment data for the state governments is also receipts data for the central government. Furthermore, in aggregating combined interest payment of central and state governments, the intergovernmental interest payments need to be netted out.

Consolidated Government Accounts

- 2.57 The constitutional authority for the preparation of the consolidated government accounts of the central and state governments is with the CAG. The CAG comes out with an annual publication entitled "Combined Accounts of Central and State Governments". So far, consolidated accounts of state and local governments or central, state and local governments are not being prepared.
- 2.58 RBI is another source which prepares a consolidated fiscal account of all state governments. This compilation is based on the State Budgets. The general government statistics compiled by the Reserve Bank of India are based on the budget data of the central and state governments. As per the present practice, the data on general government finances are published by the RBI twice a year. Provisional data are published in August (Annual Report) and September (RBI Bulletin). Then, revised data are published in RBI Bulletin at the time of the publication of the Report 'State Finance: A Study of Budgets' by the RBI. Revised data is

generally published between January and March³. The database is entitled as 'Combined Receipts and Disbursements of the Central and State Governments'.

Summary

- 2.59 The universe of fiscal data sources may be considered as mainly consisting of sources at primary, secondary and apex levels. At the primary level, all buyers and sellers, registered taxpayers and assessees are involved. At the secondary level, various government ministries and departments and specialized institutions and platforms such as the RBI, CGA, CAG, CSO, GSTN and PFMS are involved. At the apex level, it is the central, state and local governments who are the owners of their fiscal data. They also have the right and duty to publish and share these data.
- 2.60 In processing fiscal data such that they become sharable and presentable at different stages, some key steps are involved. These may be referred to as (a) Anonymization, (b) Compilation, (c) Aggregation and (d) Verification.
- 2.61 Institutions that play a key role at the apex level are the central and state governments. The local bodies have the responsibility and right to publish and share their data but so far, their fiscal data management has remained considerably deficient in India. At the secondary level, the important institutions are the CAG, CGA and the RBI. Newly created digital platforms such as the GSTN and the PFMS will play an increasing role in the compilation, sharing and utilization of fiscal data in future. A key institution which has a constitutional place and recognition is the FC of India which is usually constituted every five years. The FC is both a key user and provider of inter-state fiscal data on a comparable basis. However, lack of continuity in the series provided by the FCs underline the underutilization of the fiscal data that can potentially result from a follow-up of the FC work on a continuous basis. This effort would also facilitate the working of the succeeding FCs.

_

³ PPT. presented by the RBI members during the second meeting of the FSC

3. Centre's Fiscal Statistics: Playing a Pivotal Role

- 3.1 The central government, apart from being the largest in size as measured by its share in combined government expenditure amongst individual governments in India's federal system, also carries with it the responsibility of anchoring macro-stabilization policies for the country. Central fiscal data needs to be accurate, transparent, and reliable for its own use in addition to its potential uses for other stakeholders in the economy including state and local governments, businesses and industries, financial institutions, international observers, researchers and individuals.
- 3.2 Central government finances comprising central taxes, non-tax revenues, revenue and capital expenditures, borrowing, revenue and primary deficits, finances of the departmental enterprises, outstanding debt and government guarantees are part of the central budget. The finances of public enterprises may be kept at the level of individual enterprises and in some aggregated form in the annual report of the department of public enterprises. The central government finances have a bearing on subnational finances through flows of funds resulting from sharing of central taxes, grants, on-lending to state governments, and interest payments and repayments made by the state governments.
- 3.3 Central finances become available on an annual basis through the Union Budget of the Government of India. Apart from the Ministry of Finance, the CGA and RBI also provide data on centre's fiscal variables. The CSO provides the macro-economic counterpart of fiscal aggregates such as of the government/ public sector consumption expenditure and investment expenditures. It is expected that Centre's fiscal statistics would be kept in the best of ways so that Centre's fiscal data keeping can become a guide to state and local governments. However, there are many aspects of Centre's fiscal data system that have remained deficient.

Institutional Arrangements

3.4 A number of institutional arrangements are in place to oversee and examine Centre's fiscal data system.

Parliament and Parliamentary Committees

3.5 The central government is answerable to parliament and its specialized committees for the soundness and upkeep of fiscal data and for the policies that are based on such data. Parliamentary Committees are of two kinds: Standing Committees and Ad hoc Committees. Standing Committees are permanent and regular committees which are constituted from time to time in pursuance of the provisions of an Act of Parliament or Rules of Procedure and Conduct of Business in Lok Sabha. There are three 'financial committees', namely, the Estimates Committee, the Public Accounts Committee, and the Committee on Public Undertakings that have a direct bearing on fiscal matters.

Funds of the Central Government

3.6 There are three types of funds that the central government maintains namely, the Consolidated Fund of India, the Contingency Fund of India and the Public Account. The Public Account consists of a group of funds.

- 3.7 The Consolidated Fund of India (CFI) is the main fund of the Government of India. This fund is formed under the provision of Article 266 (1) of the Indian Constitution. The inflows to this fund are by way of taxes like Income Tax, Customs and GST. The CFI also receives non-tax revenues which arise to the government in connection with the conduct of its business. Loans raised by issue of treasury bills are also received in this fund. The government meets all its expenditure including loan repayments from this fund. No amount can be withdrawn from the fund without the authorisation from the Parliament.
- 3.8 The Contingency Fund of India is set up in the nature of an imprest account under Article 267 (1) of the Constitution of India. The corpus of this fund is currently Rs. 500 crore. Advances from the Fund are made for the purposes of meeting unforeseen expenditure by the President of India. This amount is replenished to the Fund to the full extent as soon as Parliament authorizes additional expenditure. The Secretary to the Government of India, Ministry of Finance, Department of Economic Affairs holds the Fund on behalf of the President of India.
- 3.9 The Public Account is constituted under Article 266 (2) of the Constitution. All public moneys other than those covered under Consolidated Fund of India received by or on behalf of the Government of India are credited to the public account of India. The receipts under Public Account do not constitute normal receipts of Government. Thus, Parliamentary authorization for payments from the Public Account is not required. Some examples of the public accounts are (1) bank savings account of the departments/ministries, (2) National Investment fund, (3)National Disaster Response Fund (NDRF), (4) National Small Savings Fund, (5) Defense Fund, (6) Prarambhik Shiksha Kosh, (7) MNREGA fund, and (8) Public Provident fund.

Central Ministries and Departments

- 3.10 Each ministry and department of the central government is a repository of centre's fiscal statistics. It is these ministries/ departments who handle all expenditures, overseeing these from the stage of formulating 'demands' to spending and 'charging' expenditures under approved budgetary heads. In addition, these ministries/ departments also collect non-tax revenues with respect to services provided by them or government assets managed by them in the form of user fees, license fees and sale of property rights through auctions etc. of such assets as the spectrum.
- 3.11 While the domain of the central government activities is defined in the Constitution under Schedule 7 and these pertain to the Union List and the Concurrent List, the ministries and departments of the central governments actually cover all the three lists. The number of ministries and departments is not fixed. New ministries/ departments can be created by administrative orders and similarly old ones can be abolished or merged or renamed by administrative orders. In the 2018-19 Budget, 53 ministries and 33 departments are listed (Annex 1).

Ministry of Finance

3.12 Among the central ministries and departments, in respect of fiscal matters, it is the Ministry of Finance (MoF) which plays a pivotal role. It is the MoF where all fiscal data pertaining to different central ministries and departments are compiled and brought together with a view to preparing Centre's annual budget. The MoF is not only the repository of fiscal data of the entire central government but it also is responsible for formulating the fiscal policy

of the central government and the management of central finances within the constraints placed by Centre's FRBMA. The MoF is one of the largest ministries in the central government and it consists of a number of departments such as the following:

- 1. Department of Economic Affairs
- 2. Department of Expenditure
- 3. Department of Financial Services
- 4. Department of Investment and Public Asset Management (DIPAM)
- 5. Department of Revenue

Controller General of Accounts (CGA)

- 3.13 Controller General of Accounts derives his mandate from Article 150 of the Constitution. This statutory mandate as incorporated in the Allocation of Business Rules 1961 brings out the duties and responsibilities of CGA as below:
 - a. General principles of Government accounting relating to Union or State Governments and form of accounts, and framing or revision of rules and manuals relating thereto;
 - b. Reconciliation of cash balance of Union Government with Reserve Bank in general and, in particular, of Reserve Deposits pertaining to Civil Ministries or Departments;
 - c. Overseeing the maintenance of adequate standards of accounting by Central Civil Accounts Offices;
 - d. Consolidation of monthly accounts, preparation of review of trends of revenue realization and significant features of expenditure etc and preparation of annual accounts (including Summary, Civil Appropriation Accounts) showing under the respective heads, the annual receipts and disbursements for the purpose of the Union Government;
 - e. Administration of Central Treasury Rules and Central Government Account (Receipt and Payment Rules 1983);
 - f. Coordination and assistance in the introduction of management accounting system in Civil Ministries or Departments;
 - g. Cadre management of Group 'A' (Indian Civil Accounts Service) and Group 'B' Officers of the Central Civil Accounts Offices;
 - h. Matters relating to the Central Civil Accounts staff belonging to Group 'C' and 'D';
 - i. Disbursement of Pension through Public Sector Banks (PSBs) in respect of Central Civil Pensioners, Freedom Fighters, High Court Judges, Ex-M.P.s and Ex-Presidents.
- 3.14 The Office of the Controller General of Accounts (CGA) is vested with the responsibility of compiling the accounts of the civil ministries of the Government of India. The accounting set up by the CGA in the ministries comprises a Principal Account Office (PrAO) at the ministry and a large number of Pay and Accounts Offices (PAOs), which form the basic accounting unit. The PAO maintains item-wise accounts of all the transactions involving Consolidated Fund, Contingency Fund and Public Accounts. Various subsidiary accounts such as Loan and Fund accounts are also maintained by the PAOs.
- 3.15 The central government accounts compiled by the PAOs are consolidated on a monthly basis in the PrAO at the ministry. The consolidated accounts of the ministry are rendered to the CGA for further consolidation and dissemination through the website with a time lag of one month. The data provide monthly actual (un-audited) and cumulative position of major items of receipts, expenditures and fiscal balance in relation to the budget estimates of the current fiscal year as well as a comparative position for the corresponding period of the previous year.

3.16 The CGA also prepares the annual accounts of the Government, comprising the Union Government Finance Accounts and the Union Civil Appropriation Accounts. These documents are presented before the Parliament after their statutory audit by the CAG. The monthly fiscal data for the State Governments are compiled by the Office of the Accountant General (AG) of the respective states with a lag of two-three months but are not disseminated to the public at present. These are published as Finance Accounts of both Central and State Governments separately. The combined accounts of both the Governments have not been published by the CAG relate to 1985-86 and not available thereafter.

Tax Statistics

3.17 Tax data are generated in terms of actual cash receipts into government accounts under direct and indirect taxes which are data based on periodic returns filed by the assesses. Both sets of data are high frequency data and reconciliation between tax payments and tax liabilities are done on an annual basis. The Department of Revenue, Ministry of Finance is responsible for all matters relating to the administration of Central taxes. The Central Board of Direct Taxes (CBDT) administers the direct taxes through its subordinate organisation namely, Income Tax Department while the Central Board of Indirect Taxes and Customs (CBIC) is responsible for the administration of indirect taxes through Departments of Customs and Central Excise.

a. Direct taxes

- 3.18 The Research and Statistics Wing of the Directorate of Income Tax (RSP&PR) of the CBDT collects and compiles direct tax statistics from a large number of field units located throughout the country. The data flow from the field offices of the Commissioners and Chief Commissioners of income tax are consolidated at the all-India level. The Directorate prepares aggregated statistical statements and reports of different periodicities (monthly, quarterly and annual) based on data received from the field offices.
- 3.19 'Taxpayer base' is the focal point of any tax regime and typically bears a direct relationship with tax revenues. This taxpayer base has been growing over the years. The Economic Survey 2017-18 (*Chapter 1: State of the Economy: An Analytical Overview and Outlook for Policy, page 7*) makes the following observations:
 - After November 2016, 10.1 million filers were added compared with an average of 6.2 million in the preceding six years.
 - About 1.8 million additional tax payers were added to the tax base due to demonetization-cum-GST, representing 3 percent of existing taxpayers.
 - New filers reported an average income, in many cases, close to the income tax threshold of Rs. 2.5 lakhs, limiting the early revenue impact. As income growth over time pushes many of the new tax filers over the threshold, the revenue dividends should increase.
- 3.20 Both the CBDT and CBIC collect vast amounts of data with respect to registered taxpayers and assesses who file returns. This taxpayer universe consists of individuals, business firms, and companies. Data pertains to their transactions and regulate periodic returns. These data may also contain some third party information. For the CBDT, the main channel of information is the annual information return (AIR). The Central Information Branch (CIB) provides information from foreign jurisdictions. Information may also be obtained from the Directorate of Intelligence and Criminal Investigation (DI&CI), Suspicious Transaction

Reports (STRs) received from the Financial Intelligence Unit (FIU) and Tax Evasion Petitions (TEP) from individual agencies. The National Securities Depository Limited (NSDL) works as the designated agency to receive AIR from the assessees.

- 3.21 In addition to the AIR mechanism, third party information from internal as well as external sources, through the CIB by the IT Department. The CBDT collects online information on TDS data. Tax deductions have legal obligation to submit quarterly data in Form 26QAA. The CBIC has three tax groups, viz., GST (CGST, IGST, UTGST) and domestic indirect taxes, non-GST indirect taxes and customs. GST data are accessed from the GSTN and ACES system. On the customs side the EDI System, ICES provides data. The ICES interacts with trade, transport, banks and other regulatory agencies handling customs clearance of import and export cargo. ICEGATE serves as the e-commerce gateway for customs. Both of these systems have an interface with the GSTN.
- 3.22 With respect to taxation issues arising from cross-border transactions and transfer pricing, the Competent Authority under Article 26 and 27 of the Double Tax Avoidance Agreements (DTAAs) receives and sends information to foreign tax jurisdictions. Separate Tax Information Exchange Agreements (TIEAs) have also been entered into by India over the years with a number of tax jurisdictions.

Integrated Taxpayer Data Management System

- 3.23 In 2009, the investigation wing of the IT Department developed a data mining method namely, the Integrated Taxpayer Data Management System (ITD-MS). The IT department has initiated a project on Data warehouse and Business intelligence (DW& BI) to strengthen the non-intrusive information driven approach to improve compliance and effectively utilize information in all areas of tax administration.
- 3.24 Other key agencies in the Ministry of Finance that provide data relevant for economic and tax intelligence work are:
 - a. Central Economic Intelligence Bureau (CEIB)
 - b. Group on Economic Intelligence (GEI)
 - c. Information Exchange Networks namely Secured Information Exchange Network (SEIN) and National Economic Intelligence Network (NEIN)
 - d. Financial Intelligence Unit (FIU), which was set up in 2004 to receive, process, analyse and disseminate information on suspect financial transactions to enforcement agencies and foreign FIUs; and
 - e. Directorate of Enforcement(ED), which was established in 1956 and administers the Foreign Exchange Management Act, 1999 (FEMA) and certain provisions under the Prevention of Money Laundering Act, 2002 (PMLA).
 - f. Securities and Exchange Board of India (SEBI), which was constituted under the SEBI Act, 1992, and is the registering, supervisory and regulatory body for the securities sector.

b. GST and other Indirect Taxes

3.25 The Main central taxes until the implementation of GST used to be income tax, corporation tax, customs duties, union excise duties, and service tax. In addition, the central government also handles the taxes levied in the UT governments. These are state-level taxes

that are levied by the Union government. With the implementation of GST, it is now easier to divide taxes into two categories namely, GST and non-GST taxes. In the list of non-GST taxes, as far as the central government is concerned, the prominent taxes are the direct taxes namely, income tax and corporation tax. GST is the main domestic indirect tax. However, certain indirect taxes also remain outside GST such as customs duties and central excise duties on POL products. In the case of customs duties, there is one component of IGST which has taken the place of the earlier countervailing duties. The GST at the central level itself consists of CGST, IGST and UTGST.

- 3.26 With the implementation of the GST, the earlier Central Board of Excise and Customs (CBEC) has been renamed as Central Board of Indirect Taxes and Customs (CBIC) and the source of revenue data has shifted to a new authority namely the GSTN although the ownership of centre's indirect tax data remains with the CBIC⁴. GSTN is a Section 8 not-for-profit company. It is a non-Government, private limited company. It was incorporated on March 28, 2013. The Government of India held 24.5% equity in GSTN and all States of the Indian Union, including NCT of Delhi and Puducherry, together held another 24.5%. Balance 51% equity was with non-Government financial institutions. The Company has been set up primarily to provide IT infrastructure and services to the Central and State Governments, tax payers and other stakeholders for implementation of the GST. The Authorised Capital of the company is Rs. 10 crore. In the May 2018 meeting of the GST Council, it was agreed that the 51% held by these private entities should be taken over by the government and eventually the central government should hold 50% and the state governments will hold 50% collectively.
- 3.27 GST data, available from GSTN as well as from the central and state governments and the RBI, needs to be shared on a continuous basis amongst different tiers of the government as also with economists, analysts and public at large. Several aspects of GST data are of critical importance including tax revenue data, tax base data, input tax credit data, output tax data, import and export data and data on inter-state movement of goods and services. The kind of data that may be generated from the GSTN and its potential use is discussed further in Chapter 6.
- 3.28 There is a need to develop a clear format in which GST data should be made available to potential users through a centralized website. This may be the website of the GST council or any other specialized central government body which may co-ordinate data from GSTN, Central and State governments and the RBI. A committee⁵ constituted by the Central Statistical Organization has been tasked to assess the kind of data that may be generated by the GSTN and the way it may be utilized for generating macroeconomic aggregates.

Consolidation of multiple data warehouses

3.29 The consolidation of multiple data warehouses and other operational data stores will produce a single, consistent, integrated and accurate view of the data within the MoF. Creating an enterprise data warehouse that consolidates and integrates multiple data and information,

⁵ Sub-Committee of Advisory Committee on National accounts Statistics (ACNAS) for examining the flow of data from GST Framework. This committee is developing a template for capturing GST data. These data may be sourced from the GSTN, RBI, CBEC, state governments and other sources.

⁴ In his budget speech for 2018-19, Finance Minister Arun Jaitley said with the roll out of GST the name of CBEC would be changed to CBIC. "Through Finance Bill 2018, we are amending the Central Boards of Revenue (CBR) Act, 1963, as well as the Central Goods and Services Tax Act, 2017, replacing CBEC with CBIC

will optimally provide a single view of the inflow and outflow of data or information. This will maximise the use of information on a comprehensive, standardised business intelligence platform.

3.30 The TARC (2014) had noted that presently, there are a number of disjointed and disconnected enterprise data warehouses, that are either in the process of being constructed (i.e., the CBDT) or are already working (e.g., the CBEC (now CBIC), FIU and CEIB). These data warehouses have been developed for organisation-specific goals and purposes without a common understanding among them. Bilateral meetings between the CBIC and CBDT were held to develop a streamlined mechanism for exchange of information. For automatic exchange of data or information between the CBDT and CBIC, joint bulk matching exercises for service tax, and exports and imports have been considered. In these meetings, efforts have been made to arrive at standard operating procedures to streamline request-based exchange between the two departments, but an integrated data warehouse ultimately should be set up.

Assessment of Tax Expenditure/ Revenue Forgone

- 3.31 Revenue foregone is known in the literature on public finance as 'tax expenditure'. Tax expenditure data are always estimates. These carry critical information in the formulation of tax and budgetary policies but these cannot be directly observed and must therefore be estimated. Tax expenditure are the estimated quantified value of deductions and exemptions in the tax statutes. The amount of revenue raised is largely dependent on the dimensions of taxpayer base and applicable tax rates. Tax expenditures are implicit expenditures which bypass the annual scrutiny of Parliament. The central budget has been including a statement of revenue forgone since 2006.
- 3.32 In India, tax expenditures are accounted for under the Revenue Foregone Statement, currently published as 'Statement of Revenue Impact of Tax Incentives under the Central Tax System' issued annually with the budget. The revenue foregone estimates are based on the assumption that the tax base will not be affected by removal of tax incentives and that all other provisions remain unchanged when an incentive is eliminated. Moreover the statutory rates are considered as the benchmark rates while any deviation from these is considered as revenue forgone.
- 3.33 Estimation of tax expenditures is a highly technical exercise. It is done by creating a normative or benchmark system of taxation. The benchmark system is developed by considering principles of efficiency, equity, simplicity and pragmatism. Tax expenditure analysis also requires making a distinction between positive and negative tax expenditures, tax benefits and tax incentives, and inflation indexing of tax bases, among other considerations⁶.
- 3.34 In India, the revenue foregone exercise has so far been taken internally in the Ministry of Finance. There is a need to examine the technical adequacy, coverage, and reliability of the tax expenditure estimates prepared by the ministry. Similarly, there is a need for also undertaking tax expenditure estimation exercises at the state level. It would be useful to constitute a committee of experts to review the estimation undertaken by the Ministry of

37

⁶ Nakamura, T. (n.d.). *Tax Expenditures: A Comparative Study of the Tax Subsidies in Selected OECD Countries*. Retrieved December 2014, from World Finance Conference: http://world-finance-conference.com/papers_wfc2/532.pdf
OECD. (2010). Tax Expenditures in OECD CountriesMinistry of Finance, Canada. (2010). Tax Expenditures: Notes to Estimates/Projections 2010.

Finance with a view not only to streamlining the methodology but also to indicate to the states how these exercises are important and should be undertaken by them.

Estimation of Implicit Subsidies

- 3.35 Implicit subsidies arise due to unrecovered costs of publically provided goods and services. A number of studies for estimating the volume of implicit subsidies have already been undertaken on behalf the Ministry of Finance or otherwise by institutions such as NIPFP. Similar studies have also been undertaken at the state level. Overtime, the methodology of estimation has evolved and classification of these subsidies into suitable categories such as social and economic services, merit and non-merit categories, etc. has been provided. Reform of the implicit subsidies has however lagged behind. With these reforms, it is expected that efficiency of government expenditures may increase and/or non-tax revenues in the form of user charges and fees may increase.
- 3.36 For this purpose, the following steps may be taken:
 - a. Estimation of implicit subsidies should become an annual exercise. This exercise may be outsourced by the MoF to specialised institutions.
 - b. The MoF may take a view on proposed reforms for rationalizing and reducing the implicit subsidies each year and make it explicit in the budget or otherwise.
 - c. In subsequent years, the impact of initiatives taken up during the course of a fiscal year for reforming the implicit subsidies should be assessed and published.
 - d. Similar steps should be implemented by the state governments.

Non-tax revenues

3.37 The primary source of non-tax revenues are the various government departments who administer various tariffs, fees, and user charges. Non-tax revenues of Government of India comprise a large bouquet of receipts, collected by individual departments/ministries. Primarily these receipts come from dividends, interest receipts, spectrum charges, RTI application fee, purchase of forms/magazines by students and many other such payments by citizens/corporates/other users. The compilation of data on non-tax revenues is mainly at an annual frequency and at a level of aggregation given in budgetary data. In the case of central government, CGA's monthly accounts provides these at a highly aggregated level. However, the central government's recent initiative to develop a Non-Tax Receipt Portal (NTPR) as part of the Digital India initiative can facilitate provision of high frequency non-tax receipts data which can also be disaggregated at the level of departments and ministries of the Union government.

Data relating to government owned assets

3.38 The central government as also the state and local governments own considerable amount of assets which may be financial or physical in nature. Physical assets may include minerals, land, forests, water, buildings, resources under the ocean and space. Financial assets relate to equities owned and loans given by the government. These assets also generate revenues in the form of non-tax revenues which may be return on equity, interest on loans given by the

government and fees and user charges for the services provided by the government that may utilize these assets.

- Government owns resources on, below and above land as well as in the territorial waters (12 nautical miles or 22.2 km from the base line). However, an authentic enumeration or valuation of these resources is not readily available. The Ministry of Defence has recently estimated that the land owned by it amounts to 17.57 lakh hectares. In a recent write-up, Debroy⁷, a member of the Niti Ayog, indicates that the railways own 4.40 lakh hectares (43,000 hectares identified as land not required for operational purposes), port trusts have 6,300 hectares (some uncertainty about this data), the Airports Authority of India has 20,400 hectares, India Post has at least 1,900 vacant plots of prime real estate and central PSUs possess 95 lakh hectares of surplus land. Similarly, there would be large land ownerships with the state and local governments, although no centralized data are available.
- Ownership of minerals and water are equally valuable. Recent coal auctions have led to significant revenues for the state governments. Similarly, the central government has had some windfall gains through spectrum auctions. A recent study (CBGA, 2014) has estimated that the value of hydro-carbon and other mineral resources available in the country is at least Rs. 5011.6 lakh crore⁸. This amounts to almost 37 times India's GDP at current prices in 2015-16.
- Authentic up-to date and transparent information on government owned assets would 3.41 facilitate generating both recurring and non-recurring income for the government. Nonrecurring incomes may arise when sales of these assets are taken up from time to time. Lack of availability of authentic information also leads to encroachment of government owned lands or buildings. A number of initiatives are required to remedy this situation. The relevant database should have digitised ownership records. There is also the issue of valuation of the assets. Often the value entered into the records pertain to purchase price or old prices on which acquisition may have been made. There is a need to value the government owned assets so that the government may have a reliable idea of the value of the assets that it owns.
- Assets are not only owned by the government but also by the public sector enterprises. There is a need to have a consolidated statement of the value of publicly owned assets so that an assessment can be made of the actual and the potential returns from the ownership of these assets for the public sector as a whole.
- In order to exploit the revenue potential of these resources, new initiatives are needed. 3.43 First, an exhaustive survey, enumeration and compilation of ownership records of these resources are needed. Second, a modern office to serve the role of an estate manager is called for. Third, a suitable policy is required to ensure inter-generational equity in the exploitation of this ownership of the government, for not only of the present generation but for all future generations.

Debt and Deficit Statistics

Accountability (2014).

High frequency debt and deficit statistics are not available in the public domain except for the deficit of the central government which is available at a monthly frequency and for

⁸ Kundu, S.,"A Note on the Estimated Value of Government-Owned Natural Resources in India", Centre for Budget and Governance

⁷ Indian Express, published November 13, 2015; http://indianexpress.com/article/opinion/columns/all-the-sarkars-land/

individual states published by the CAG for different states. Similar information is also available with the RBI. The nature of RBI data may be different from that of the CAG in the sense that it can provide information on individual borrowing instruments, the terms of such borrowings, gross borrowing and net borrowing etc. RBI also compiles data for debt servicing including time profile of repayments.

- 3.45 At present and historically, central government debt has been managed by the RBI. There is a current debate as to whether an independent debt management office may be set up. This would facilitate the institutional separation of monetary management from debt management. As an interim arrangement for a full-fledged agency for managing public debt to be called as Public Debt Management Agency (PDMA), the government had set up a Public Debt Management Cell (PDMC) at RBI's Delhi office in 2017. The aim of setting up the Public Debt Management Agency (PDMA) is to resolve issues relating to conflict of interest as RBI decides on the key interest rates as well as undertakes buying and selling of government bonds. Since April-June 2010-11 (Q1), Public Debt Management Cell (PDMC) (earlier Middle Office), Budget Division, Department of Economic Affairs, Ministry of Finance, Government of India has been bringing-out a Quarterly Report on Debt Management on a regular basis.
- 3.46 The Internal Debt Management Department was originally created as a cell within the Secretary's Department in April, 1992 comprising the Public Borrowing, Open Market Operations and Ways and Means sections. The Cell was fully constituted as an independent unit called Internal Debt Management Cell (IDMC) on October 1, 1992 and later renamed as the Internal Debt Management Department (IDMD) in May 2003. Consequent upon the formation of the Financial Markets Department (FMD) in October 2005, some of the market related activities were carved out from IDMD to form part of FMD. The main activity of the IDMD is to manage the public debt of Government of India/ State Governments. It also regulates and supervises the Primary Dealers System and has the responsibility for development of Government Securities Market. These activities involve:
 - (i) Floatation of Central/State Government Loans preparation of calendar for issuances of Government of India dated securities and Treasury Bills, introduction of new instruments for Government's market borrowings;
 - (ii) Fixing of limits on Ways and Means advances (WMA) for both Central and State Governments and monitoring the use of these limits on a daily basis;
 - (iii) Authorisation, regulation and supervision of the Primary Dealer system;
 - (iv) Market development activities like the introduction of new instruments, development of trading platform, clearing and settlement systems and widening of investor base;
 - (v) Facilitating State Governments' investment of their surplus cash balances in Treasury Bills and dated securities under various funds.
- 3.47 Data on government borrowing for the central and state governments in terms of fresh borrowing, repayments, and debt servicing are available with the Reserve Bank of India as well as the Government Debt Office.
- 3.48 One dimension of borrowing by governments is borrowing as part of external assistance which may be in the form of loans and grants. Since all such external borrowing even by the subnational governments can only come through the central government, the flow of external resources and the servicing of liabilities which get created through this process involves transactions in foreign currency. These data can be captured through the Reserve Bank of India and the Ministry of Finance of the central government as also by the concerned state

governments/ central ministries and departments who might be the final recipients of such external assistance. Where liabilities are in terms of an external currency, the related fiscal data relating to repayments, interest payments, and outstanding debt needs to be at current exchange rates.

3.49 The CAG, in its Report on Compliance of FRBM Act, 2003, published in 2016 (Report No. 27) made the following observations:

"There was inconsistency between provisions contained in the FRBM Act and Rules made thereunder in respect of assumption of additional liabilities. (Para 2.4)

As a result of existence of varying practices in treatment of expenditure on grants for creation of capital assets and incorrect classification of expenditure in certain welfare schemes, the effective revenue deficit was understated during the financial year 2014-15. (Paras 3.3.5.1 and 3.3.5.2)

Recommendation of Twelfth Finance Commission relating to inclusion of eight additional statements in the Union Government Accounts for greater transparency, has not been acted upon, despite in-principle acceptance of the recommendation by the Government. (Para 5.1.1)"

Information on government liabilities

3.50 Just as in the case of assets, there are a number of liabilities that the central and subnational governments have. Most of these liabilities may be financial liabilities resulting from government borrowing. A good amount of these liabilities may also be contingent liabilities given with respect to loans raised by the public sector. A consolidated record of all public sector liabilities including government liabilities with respect to loans undertaken or with respect to loans guaranteed should be readily available. In the case of contingent liabilities, there is a need to re-assess the associated risks from year to year. This may require actuarial expertise and a mechanism for developing a consolidated statement of actual and contingent liabilities along with an up-to date assessment of the associated risks. This needs to be done for not only the government but also the associated departmental and public sector enterprises.

Management of FRBM

3.51 In 2003, the NDA government introduced the Fiscal Responsibility and Budget Management Bill (subsequently legislated and put to implementation in 2004) which laid the path for institutionalizing fiscal discipline, containing fiscal deficits within specified limits by improving macroeconomic management and rationalizing overall management of public funds signalling a move towards responsible fiscal management. The FRBM did achieve targeted levels of fiscal and revenue deficit once in 2007-08. The 2008 global crisis led India, among other G20 countries, to announce a host of fiscal incentives by way of reduction of indirect tax rates and other fiscal stimulus measures. The FRBM Legislation underlined the importance of achieving fiscal discipline by way of external debt management, tax base expansion through enhanced voluntary compliance and curtailment of non-plan expenditure. The central government is yet to re-achieve the FRBMA target after 2007-08. In the meanwhile, the FRBMA itself was amended a number of times. The latest FRBMA amendment was undertaken in 2018 along with the 2018-19 Budget. Accordingly, the stipulated fiscal consolidation path has been recast.

3.52 There is much debate as to whether the fiscal deficit numbers given in the budget are accurate or not. In an assessment of the working of the FRBMA (Report No. 27, 2016), the CAG had certain comments that pointed out to non-transparency of fiscal data.

"During the certification of 'net proceeds' by the CAG, based on the recommendations of the successive Finance Commissions, it was noticed that during the period 1996-97 to 2014-15 an aggregated amount of INR 81,647.70 crore was short devolved to the States."

3.53 Another critical number that has been questioned in regard to its accuracy pertains to the volume of the pool of central taxes that is divisible with the states.

Assessing public sector borrowing requirements

Under articles 292 and 293 of the constitution the central government has the 3.54 responsibility of overseeing the borrowing requirements of the central and state governments and the related volume of government debt. However, with a view to undertaking a comprehensive overview of the borrowing requirement by the public sector as a whole there is a need to assess the borrowing requirement covering different tiers of government and departmental and non-departmental public enterprises. This requires an assessment of demand for and supply of savings in the overall economy so that the availability of funds for all claimants namely, the public sector, the household sector and the private corporate sector may be assessed. At the present juncture, the household sector shows a surplus in savings over its investment demand which is reflected in household financial savings. The private corporate sector and the public sector draw upon this surplus. If the public sector draws excessively from this surplus, the cost of borrowing may be pushed up and the availability of funds for the private corporate sector may become constrained. Thus, there is a need to objectively assess the need for public sector borrowing in the context of the demand for and supply of savings in the economy. This is best done at the level of central government and ideally it should be undertaken by a team of relevant experts in an objective and transparent manner. At present, there is no such mechanism or institution which does this. One option for filling this institutional gap is to entrust this responsibility to a fiscal council which is discussed in greater detail subsequently in this report.

Fiscal estimations and projections

- 3.55 As discussed in chapter 1, fiscal data may relate to actuals, estimates (budgetary, revised) and projections. There is a need to objectively indicate wherever estimates and projections are involved. This is an issue which is common for the central and state governments. But in setting out the framework for appropriate projection methodologies, the central government may take a lead. The central government prepares three statements namely, the Macroeconomic Framework Statement, the Medium Term Fiscal Policy Statement, and the Fiscal Policy Strategy Statement. These utilize directly or indirectly, projections of some critical macro-fiscal indicators.
- 3.56 This matter may also be examined by an expert committee consisting of economists and Ministry of Finance officials. With a clear basis of underlying forward projections, the potential users of fiscal data would be benefited. From time to time, an assessment of the quality of projections should also be undertaken when the corresponding actual data become available.

Economic and Functional classification of central budget

- 3.57 Since 1957-58, the Economic Division of the Ministry of Finance has been preparing an economic classification of the Central Government budgetary transactions to make the budget a more useful tool of economic analysis. Economic and functional classification of central budget involves arranging the expenditures and receipts of the Central Government including those of railways and posts by significant economic categories distinguishing current from capital outlays, spending for goods and services from transfers to individuals and institutions, tax receipts from other receipts, and from borrowing and inter-governmental loans and grants, etc. Reclassified in this manner, the flows into and out of the Central Government can be related to important categories of transactions influencing the behaviour of the other sectors of the economy. This classification is done in a manner so as to be consistent with the national income accounting concepts and classification.
- 3.58 Currently, the Department of Economic Affairs publishes this data and the latest available economic and functional classification of central budget is for 2016-17. Moreover this data for 2016-17 budget was released on 10th July 2018 implying a significant time lag in the compilation and publishing of such data.
- 3.59 Some of the state and local governments are also preparing economic and functional classification of their budgets although with a considerable time lag. The CSO publishes at an aggregate level, the economic classification of public sector transactions including the general government.
- 3.60 There are two issues in regard to compilation of economic and functional classification of Centre's budgetary data. First, there is a considerable time lag in the presentation of economic classification after the Budget has been presented, which needs to be reduced. The second issue relates to the format of the classification. This should be kept in a form that is amenable to analysis which may be useful for policy formulation. The current format has evolved over the years. It requires periodic review. An expert committee may be periodically constituted to examine the format of the economic classification of the central budget and suggest modifications.

Linking Outlays to Outcomes

- 3.61 The Ministry of Finance has recently started Outcome Budgeting with a view to linking financial outlays to medium-term outcomes. Outlay is the amount that is provided for a given scheme or project in the Budget; while Output refers to the direct and measurable product of program activities, often expressed in physical terms or units. Outcome are the collective results or qualitative improvements brought about in the delivery of these services, often expressed in terms of improvements over ex-ante or earlier indicators and benchmarks.
- 3.62 In the 2017-18 budget, it was decided that the output and outcomes of the schemes of 68 Ministries and Departments along with their financial outlays would be presented as a part of the Budget documents in order to bring about transparency with respect to objectives and goals of each of these schemes.
- 3.63 The outcome budget presents (a) financial outlay, (b) output and deliverables and (c) projected medium term outcomes for each Scheme/Project in a single, consolidated document. This is expected to enhance transparency, predictability and impact of government policies and

schemes. This exercise will also facilitate the individual ministries to track the progress and impact of the schemes administered by them.

- 3.64 Moreover, scheme wise detailed Output-Outcome monitoring framework is being prepared after discussions with the concerned ministries/departments. The NITI Aayog is planning to have a live dashboard to monitor the outputs and outcome of schemes on a continuous basis.
- 3.65 In this context, the following steps may be taken.
- a. The outlay-outcome linkage framework should be extended to cover all government schemes and programs.
- b. The state governments should also incorporate an outlay outcome framework for their schemes and programs.
- c. Since the outcomes necessarily relate to a medium-term perspective, an evaluation exercise regarding achievement of outlays with respect to outcomes should be taken up.

Access to Centre's Fiscal Data

- 3.66 Two major sources of central fiscal data which were earlier available on a regular basis were discontinued relate to All India Income Tax Statistics and the data base of the Central Board of Indirect Taxes and Customs available through its Directorate of Data Management called CBICDDM. Their availability has now become irregular. On the website of CBICDDM, the pre-GST data are available at present. The CBIC maintained a website for sharing indirect tax data with both assesses and general public. This website used to give valuable monthly information on customs and central excise collections (commodity-wise and commissioneratewise) as well as service tax collections but for some reason, the website was not updated since November 2014. It has recently been updated but it does not give GST-related data.
- 3.67 The Indian Public Finance Statistics (IPFS) published by the Ministry of Finance has been serving the role of providing long term fiscal data for the central and the aggregate of state governments, as also on their consolidated account on a comparable basis after reconciling intergovernmental and inter-fund operations. Even publication of this important document is with an unduly long lag.

Periodic Compilation of Frequent Changes in Tax Rates and other Statutory Provisions

3.68 During the course of a financial year, the central government introduces a number of changes regarding tax rates, deductions and exemptions etc. from time to time. This information remains in individual notifications. Any potential stakeholders or taxpayer is forced to compile this information from the individual notifications or take the help of privately published compilations of the relevant notifications. It is desirable that on a periodic basis, the Ministry of Finance publishes all relevant changes in tax rates and related provisions communicated through individual notifications so that the stakeholders may have an authentic information on all applicable tax rates and provisions regarding exemptions and deductions etc. that are effective on the date when such compilation is published. It may be considered desirable to publish this information on a quarterly basis.

Some International Practices

- 3.69 Internationally, the data collection and sharing of data on the revenue side of governments, particularly in regard to taxation, has become quite developed. In a recent review of international practices, Singh (2016) observes: "Most countries have a statute or an established legal framework for data and/or information exchange.⁹ The obligation on a tax officer to disclose data or information is also provided in the statute. Tax administrations while collecting information from different taxpayers identify what type of information can be shared or restricted depending upon the nature and type of disclosure.¹⁰ Most countries clearly specify the type of information covered under legal covenants allowing data exchange. Most of the data is covered by legal protection".
- 3.70 In the UK, the Commissioners for Revenue and Customs Act (CRCA), 2005, (which created HMRC) also specifies details regarding disclosure of information by HMRC. These prescribe legal information gateways for sharing information with other government agencies. The UK recently enacted laws to provide for automatic exchange of information, leading the way to an Open Data System. HMRC collects data on its taxpayers through tax returns filed by taxpayers or other such means. It also collects third party information and brings together data from different sources and cross-matches them to uncover hidden relationships between people, organisations and other previously unidentifiable data. The Connect System, one of its analytical tools, helps it do so.
- 3.71 In the US IRS, information disclosure provisions are according to the Internal Revenue Code (IRC). The US IRS shares tax information with other governmental agencies by entering into agreements consistent with the provisions of the IRC who similarly share their information with the US IRS. Information-sharing happens at all three levels, federal, state and local.
- 3.72 The Australian Tax Office (ATO) has extensive secrecy provisions in Division 355 of Schedule 1 to the Taxation Administration Act, 1953 (TAA). For disclosing protected information, an ATO tax officer is required to ensure compliance with the relevant MoUs. An MoU, cannot authorise any disclosure of protected information that is inconsistent with the secrecy provisions under taxation law.
- 3.73 The Canada Revenue Agency's (CRA) legal obligations to disclose information are specified in a number of legislations such as the Income Tax Act, Excise Tax Act, Excise Act, Privacy Act and the Access to Information Act. Exchange of information with various federal, provincial and territorial departments is done through written collaborative

¹⁰ US IRS defines Federal Tax Information (FTI) as any return or return information received by the IRS or secondary source, such as the Federal Office of Child Support Enforcement, Bureau of Fiscal Service, etc. FTI includes any information created by the recipient that is derived from return or return information.

⁹ Countries have either separate enactments or an umbrella legislation to access and share data or information. For example, HMRC has Commissioners for Revenue and Customs Act (CRCA), 2005, which specifically empowers HMRC for data access or sharing. Canada has an umbrella enactment, Access to Information Act, 2009, which is supplemented by a code in every organisation.

¹¹ UK HMRC collects information from taxpayer data (i.e., self-assessment returns, disclosure facility data, data obtained through investigations and enquiries, and VAT and other returns such as excise), cross-government data (mostly 'cash seizure reports', which record instances where the amount of cash is over £1000 and unlawful conduct is suspected, and 'suspicious activity reports', which are reported to the National Crime Agency under the anti-money laundering legislation), other jurisdiction data, and third party data. (HMRC information notices, voluntary disclosures or information acquired by UK HMRC covered under the CRCA can be used by it in connection with any other function.)

arrangements and MoUs so that an appropriate accountability framework for the protection and proper use of information is instituted, defined and documented.

Summary and Recommendations

- 3.74 The MoF of the Union government of India maintains fiscal statistics of the central government. It is the pivotal ministry which has the responsibility of maintaining central government's fiscal data by coordinating data flows across all central ministries and departments. Correspondingly, the CGA keeps the accounts of tax and non-tax receipts and expenditures of the central government. These accounts are audited by the CAG. A number of Parliamentary Committees such as the Estimates Committee, the Public Accounts Committee and the Committee on Public Undertaking provide foresight to maintaining centre's fiscal statistics.
- 3.75 In recent years, a large number of intra-departmental digital initiatives have been undertaken to facilitate tax intelligence work. Two new digital platforms namely GSTN and PFMS have opened up extensive platforms for keeping micro level and aggregated fiscal statistics.
- 3.76 Some of the continuing problems in the maintenance of Centre's data system relate to the following:
 - 1. Non-availability/ discontinuity in access to Centre's fiscal data
 - 2. Non-reconciliation of several inconsistencies pointed out by the CAG
 - 3. Incompleteness of Centre's estimates of revenue forgone/ tax expenditures
 - 4. Consolidation of multiple data warehouses
 - 5. Issues with data relating to fiscal deficit targets
- 3.77 In spite of these difficulties, considerable innovations in fiscal data upkeep have been undertaken by the central government and the central government can play a leading role in maintaining India's fiscal statistics system at internationally comparable levels. There is a strong need for a missing apex institution such as the Fiscal Council, discussed in detail in Chapter 8 that can bring about greater consistency, quality, transparency and efficiency in relation to maintenance and utilization of fiscal statistics within the central government and across different governance tiers.
- 3.78 An Expert Committee may be set up to review estimation of tax expenditures by the central government. This Committee should provide a comprehensive methodological framework, examine central government estimates of revenue forgone in relation to coverage, normative benchmark and need for reforms of the underlying deductions, concessions and exemptions. It should provide a methodological framework which state governments may also consider in preparing their own tax expenditure estimates.
- 3.79 For estimating the volume of implicit subsidies and monitoring progress in reforming these subsidies, the following steps may be taken:
 - a. Estimation of implicit subsidies should become an annual exercise. This exercise may be outsourced by the MoF to specialised institutions.
 - b. The MoF may take a view on proposed reforms for rationalizing and reducing the implicit subsidies each year and make it explicit in the budget or otherwise.
 - c. In subsequent years, the impact of initiatives taken up during the course of a fiscal year for reforming the implicit subsidies should be assessed and published.

Similar steps should be implemented by the state governments.

- 3.80 The methodology for preparing estimates and forward projections should be provided for in all the budgetary estimates wherever such projections are used. This is particularly important for the medium-term fiscal strategy and policy statements, annexed to the central budget.
- 3.81 Annual assessment of the quality of projections should be undertaken and lessons should be drawn for improving the quality of projections.
- 3.82 GST data including IGST drawn from GSTN and central and state governments as also the RBI should be shared amongst all stakeholders and public at large. For this purpose, a format should be developed after taking into account the findings and suggestions of the GST Subcommittee set up by the CSO for this purpose.
- 3.83 There should be a centralized website for publishing all central government data. This should collate and coordinate with departmental websites and databases within the Ministry of Finance. It should also capture relevant granular and high frequency data discussed further in Chapters 6 and 7.
- 3.84 It is desirable that on a periodic basis, the Ministry of Finance publishes all relevant changes in tax rates and related provisions communicated through individual notifications so that the stakeholders may have an authentic information on all applicable tax rates and provisions regarding exemptions and deductions etc. that are effective on the date when such compilation is published. It may be considered desirable to publish this information on a quarterly basis.
- 3.85 The central government should undertake, on a periodic basis, an assessment of public sector borrowing requirement covering the overall public sector as also the central and state governments. An assessment of available demand and supply of savings should also be made at this time. The relevant information should be put on the central fiscal data website so that other stakeholders can assess the situation regarding availability and cost of borrowed funds.
- 3.86 There is a need to develop a reliable and transparent database with regard to government's assets and liabilities. In this context, the following initiatives may be undertaken.
 - a. An exhaustive survey, enumeration and compilation of ownership records of these resources are needed.
 - b. A modern office to serve the role of an estate manager is called for.
 - c. A suitable policy is required to ensure inter-generational equity in the exploitation of this ownership of the government, for not only of the present generation but for all future generations.
 - d. A consolidated record of all public sector liabilities including government liabilities with respect to loans undertaken or with respect to loans guaranteed should be readily available.
 - e. In the case of contingent liabilities, there is a need to re-assess the associated risks from year to year which may require actuarial expertise and a mechanism for developing a consolidated statement of actual and contingent liabilities along with an up-to date assessment of the associated risks. This needs to be done for not only the government but also the associated departmental and public sector enterprises.

- 3.87 There is a significant time lag in the preparation of the economic and functional classification of central government's budgetary data. There is a need to examine the current economic and functional classification of centre's budgetary data so that it can be re-classified to facilitate greater analytical utility.
- 3.88 An assessment should be made on an annual basis of the amount of tax revenues caught up in legal disputes. An assessment should also be made of the cost of all legal cases which the central government may be involved in, in the context of its regulatory functions as also in relation to its ownership of assets and liabilities.
- 3.89 In the context of outlay-outcome budgeting, the following steps may be taken.
- a. The outlay-outcome linkage framework should be extended to cover all government schemes and programs.
- b. The state governments should also incorporate an outlay outcome framework for their schemes and programs.
- c. Since the outcomes necessarily relate to a medium-term perspective, an evaluation exercise regarding achievement of outlays with respect to outcomes should be taken up.
- 3.90 There is a clear institutional gap in the procurement, collation, coordination and publication of fiscal data. This gap can be filled up by constituting a Fiscal Council supported by appropriate expertise and technical and secretariat assistance. This subject is discussed further in subsequent Chapters.

4. States' Fiscal Statistics: Facilitating Public Provision of Services

Introduction

4.1 In the post-FRBM world, issues regarding the quality and availability of fiscal data of states have become increasingly more relevant. Fiscal parameters of states have become important policy numbers which form the basis of determination of their resource requirements and borrowing limits for a given financial year. In the last 15 years, improvement in fiscal indicators has also been used by different FCs as preconditions for receipt of fiscal transfers and federal assistance. FC 12 and FC13 included a fiscal discipline or efficiency component in the tax-devolution formula with the aim of incentivizing and rewarding fiscally prudent states. Both these Commissions also linked fiscal performance to availing of debt and interest restructuring schemes. More recently, states have been awarded with greater flexibility in borrowing limits based on their fiscal performance following the recommendations of the FC 14. Thus, the need for greater transparency in accounts and timely publication of records has become paramount.

Recent developments in accounting of state level fiscal data

- 4.2 The issues and challenges in reporting, classification and aggregation of fiscal data of states have been delineated across reports of Committee to review List of Major and Minor Heads of Accounts of Union and States (LMMHA), High Level Expert Committee for Efficient Management of Public Expenditure (HLEC), successive FCs and state audit reports. Following the recommendations of these reports two significant changes in accounting have taken place impacting the classification of expenditures and federal transfers. One of the key shifts has been the decision to route all transfers under Centrally Sponsored Schemes via state treasuries from 2014-15 onwards. Earlier some central funds were directly being transferred to the bank accounts of implementing agencies, thereby escaping adequate scrutiny and audit. With the channelling of all transfers via state accounts, the related expenditure can be tracked by the AG's office through vouchers received for the same. Moreover, the IT systems in treasuries and AG offices in states ensure that there is better monitoring of transfers from centre to state treasuries, and from there to state departments or implementing agencies. In addition, all these funds being transferred under various schemes via state accounts are coming under the audit mandate of CAG which will result in an improvement in accountability and public expenditure efficiency.
- 4.3 The second significant change in classification of fiscal data at the central and state level has been the elimination of distinction between plan and non-plan expenditures in budgets from 2017-18 onwards. The artificial segmentation between plan and non-plan expenditure had resulted in creating a bias towards plan expenditure in budget assessment and policy analysis as a result of which important expenditures considered 'non-plan' like repair and maintenance of assets was neglected. In assessing expenditure requirements there is a need to take a holistic view of the aggregate expenditure rather than a fragmented one which can result in problems in resource allocation. This was recognized by FC 14 in framing its recommendations, moving away from the established practice of a plan-non plan distinction in estimating resource needs. Subsequently, the centre and many states have also dispensed with this bifurcation of expenditure, retaining only the distinction between revenue and capital expenditures.

4.4 Notwithstanding the two aforementioned developments in classification of state accounts, a lot of issues highlighted in the reports of different committees remain. In addition, audit reports of state finances have shown that there are a number of problems in the accounting and reporting of fiscal data by states which is often in violation of the accounting rules set by the respective states and the CAG. Given this backdrop, the chapter comprehensively reviews the major issues in the classification and accounting of fiscal data of state governments. It also provides a summary of the current state of reporting of state finances based on an assessment of the latest audit reports of state finances.

1. Issues in the existing system of classification of data

- 4.5 In the present classification scheme, revenue and capital transactions in the Consolidated Fund are subdivided into different sectors and sub-sectors based on functional lines. These subsectors are further classified in six tiers: (i) major head (major function of the government), (ii) sub major head (sub-function), (iii) minor head (programme of the government), (iv) sub-head (scheme), (v) detailed head (sub-scheme), (vi) object head (type and object of expenditure). The first five tiers account for the functional aspects of a transaction while object heads are a combination of three aspects functions, programme/schemes, and economic nature. States have the flexibility to create subheads under object heads as per their convenience after obtaining the consent of their respective state accountant generals.
- 4.6 However, the reports of both the High Level Expert Committee on Efficiency in Public Expenditure Management (HLEC) headed by C. Rangarajan (2011) and the Committee to review the List of Major and Minor Heads of Accounts of Union and States (LMMHA) chaired by CR Sundaramurti (2012) highlighted problems in this system of six-tier budget and accounting classification. While some of it was related to the problems emanating from the plan-non plan distinction and bypassing of state treasuries by central transfers, the other concerns raised by these two Committees regarding classification are discussed in detail below.
- 4.7 **Existing classification in major and minor heads has limited functional utility due to multiple amendments over time.** The current classification system has undergone multiple amendments due to changes in accounting rules or information requirements owing to which some of the functional attributes of the classification have diminished. An example cited was of special area programmes such as North Eastern Areas (major head 2552), Hill Areas (major head 2551) etc. which cut across functional areas but are classified as major heads.
- 4.8 Lack of uniformity in classification of different schemes under different major heads remains a challenge. The LMMHA Committee had noted that there is no standardized practice in classification of schemes. Although schemes should be classified at the sub-head level and sub-schemes at the detailed level as per the present classification system, there is a lot of variation in practice. Some schemes are also classified under minor heads and thus covered in the Finance Accounts while certain big schemes with a large budget are not reported under the minor head level. This raises significant challenges in measurement and comparison of scheme expenditure. Additionally, there is no uniform coding for central schemes across states. Given the differences in codes, it is difficult to collate and aggregate data at the central, state and combined level.
- 4.9 Moreover, this also highlights that the current system of **reporting of Finance Accounts data only till the minor head is fairly problematic** as it does not help in undertaking any useful cost-benefit assessment of government schemes and functional expenditures. First,

it does not enable the study of outcomes linked to specific functions of the government. Secondly, it does it help in the assessment of cost incurred under various items of expenditure for a specific objective, to attain a desired outcome.

- 4.10 **Limited standardization in object heads** poses a challenge in public expenditure analysis. States have flexibility in following their own list of object heads which results in significant variation LMMHA Committee noted that states often use more than one level of object head classification to give greater detail of expenditure. For instance, a few states subdivide 'salary' into further sub-components like pay, HRA, LTC etc. In this regard, both FC 12 and FC 13 had recommended the adoption of a uniform classification code till the object head to have greater consistency in comparing fiscal indicators across states. However, FC 14 recommended that only some object heads such as salary, maintenance, subsidies and grantsin-aid should be standardized, with states retaining their present flexibility to open new object heads as per their functional requirements.
- 4.11 In the backdrop of the issues highlighted above, the LMMHA Committee recommended that the **current system of classification should be replaced by a multidimensional system of classification** with the following seven mutually exclusive segments (each with its own hierarchical structure):
 - i. Administrative segment: to identify administrative responsibility of expenditures with each budget line attributable to an administrative authority
 - ii. Function segment: to classify functions of the government
- iii. Programme cum scheme segment: with standard codes for each programme and scheme to enable the development of an outcome oriented budget¹² that would facilitate linking expenditure under a programme/scheme across different levels of administration (from centre to the lowest implementing level)
- iv. Recipient segment: would recognize every entity (public or private) that receives public funds with a unique code to evaluate and track resource allocation
- v. Target segment: would be used to identify expenditures targeted at specific policy objectives that are not being captured well by the existing system such as budgets for gender, SC/ST and BPL
- vi. Economic segment: would cover the list of object heads in the existing system that reflect expenditure of an economic nature
- vii. Geographical segment: would indicate the actual location (states, districts and towns/villages) of the transaction enabling inter-regional comparisons of public spending.
- 4.12 While the proposed system of classification addresses the underlying problems in the present classification system, there would be significant challenges in making this transition which have also been highlighted by the Comptroller and Auditor General of India (CAG) and Ministry of Finance in their submissions to the FC 14. As per CAG, implementing the recommendations of the LMMHA Committee would require a powerful computing infrastructure in place along with a strategy for linking legacy data and building capacity of functionaries in transitioning to the new system. The Ministry of Finance highlighted that the proposed framework would require sweeping changes in the payment and accounting software,

-

¹² Programme would be defined as a set of activities required to achieve a defined objective, with schemes and sub-schemes grouped into suitable category of programmes

financial disclosures and reporting formats and budgetary statements of the union and state governments. However, the Ministry of Finance submitted that it intended to have an Integrated Financial Management Information System (IFMIS), which would also incorporate the revised classification scheme.

2. Issues in transition to an accrual system of accounting

- 4.13 The merits of an accrual system of accounting versus a cash-based system have increasingly been recognized over the last two decades with a number of countries (particularly in the OECD) making the transition. Accrual accounting recognizes flow of resources at the time economic value is created, changed, transferred, or extinguished regardless of whether it was backed by a cash transaction. Unlike a cash-based system, income is recorded when it is earned and not at the time of receipt of cash. Similarly, expenses are booked when the resources are actually consumed. As highlighted by the FC 12 the accrual system allows for better cost-benefit calculations, accurate distinction between current and capital expenditures, and a clearer position of debt and liabilities of a governments. Thus, the information and records generated in an accrual system would be more reflective of the actual financial position of governments and be far more useful to policy makers. In light of these advantages, the FC 12 had recommended transitioning to an accrual system in the medium term.
- 4.14 However, recognizing the constraints involved in making such a transition, centre and the states were asked to append certain additional statements to the existing cash-based accounts to aid more informed policy making. These statements included: (i) statement of subsidies given, both explicit and implicit, (ii) a statement containing expenditure on salaries by various departments/units, (iii) detailed information on pensioners and expenditure on government pensions; (iv) data on committed liabilities in the future; (v) statement containing information on debt and other liabilities as well as repayment schedule; (vi) accretion to or erosion in financial assets held by the government including those arising out of changes in the manner of spending by the government; (vi) implications of major policy decisions taken by the government during the year or new schemes proposed in the budget for future cash flows; and (vii) statement on maintenance expenditure with segregation of salary and non-salary portions.
- 4.15 In addition, the FC 12 had also recommended that the centre should set up a National Institute of Public Financial Accountants given the demands placed on the accounting personnel in making the transition to an accrual based system. While state and central governments have been appending some statements to their finance accounts, there has not been any significant movement towards an accrual system at either level. This is reflective in the recommendations of the FC 14 which are a reiteration of the FC 13's position on the issue: "We, therefore, reiterate the recommendation of the FC-XII that the building blocks for making a transition to the accrual-based accounting system in terms of various statements, including those listed by the Commission, should be appended in the finance accounts by the Union and State Governments."

3. Current issues in fiscal data accounting and reporting by states as observed in CAG audit reports on state finances of 2016-17 and 2015-16

4.16 **Misclassification of revenue and capital expenditure** by States is a problem that is often highlighted in CAG's audit reports on state finances. Among the common misclassification errors is the tendency to record grants as capital expenditure. As per the Indian

Government Accounting Standard (IGAS)-2, grants-in-aid need to be classified and accounted as revenue expenditure in the Financial Statements of the grantor regardless of the intended purpose of the grants.

Another classification error is the recording of maintenance expenditure on assets as 'Capital' instead of 'Revenue'. The Government Accounting Rule, 1990 specifies that capital expenditure will only include expenditure incurred with the aim of increasing the concrete assets of a material and permanent character.

- 4.17 **Transfer of funds from Consolidated Fund to Civil Deposits in Public Account** which tends to overstate state expenditure in a financial year is another issue noted by CAG. States have also been known to park funds received under different central schemes)in Civil Deposits in Public Accounts to avoid lapse of funds which in turn inflates the expenditure on the Consolidated Fund of the state. This is not equivalent to any real expenditure and thus can present a misleading picture of fiscal activity in a given year.
- 4.18 **Opaqueness in government accounts** due to increasing use of the **minor head '800-Other Receipts/Expenditure'** across almost all states. Notwithstanding CAG's well-defined, comprehensive list of classification of activities as major and minor heads, some states routinely classify a significant proportion of major head expenditure under the somewhat opaque minor head '800-other receipts/expenditure'. In some states expenditure on major schemes has also been booked under '800-other'. Booking expenditure and receipts as 'other' vitiates the purpose of financial transparency, by not providing policy makers a more accurate disaggregated picture of the flow and use of finances.
- 4.19 **Opening of new sub-heads and detailed heads in budget without consent** of Accountant General has also been noted in a few states. States can only open new sub-heads and detailed head for any schemes/sub-schemes as per law after the advice of the State Accountant General.
- 4.20 **Irregular maintenance of bank accounts** to park funds withdrawn from the Consolidated Fund by different state departments often without proper sanction is also a practice seen in some states. It is observed that the money thus transferred is also not utilized for the intended expenditure in that year. This also impedes even the process of working towards the transition to accrual accounting as has often been recommended by different committees and FCs.
- 4.21 **The continued use of personal deposit (PDs) accounts after the close of the financial year** inflates the expenditure under the service head for which the PD is opened. Although funds transferred to the PD accounts are booked as expenditure under the related service heads, PD accounts are required to be closed at the end of a financial year. Therefore, the service heads should not show the transferred amounts at the close of the year. However, this is regularly flouted in varying degrees across states.
- 4.22 Outstanding balances under major suspense accounts awaiting final classification in some states like Uttar Pradesh have also impacted the accuracy of the finance accounts as noted by the AG. Suspense heads are adjusting account heads to indicate receipt or expenditure transactions which cannot immediately be booked under their final heads of account due to inadequate information or other reasons. If balances are not cleared from suspense heads, it would give an inaccurate position of receipts or expenditure of the state for a given year.

4.23 **Incorrect classification of transfers to parastatal or implementing agencies** (such as state development authorities) under '3604-compensation and assignment to local bodies and panchayati raj institutions' (PRIs) in some states gives an unrealistic picture of state assistance to local bodies.

Observations of the FC 14

- 4.24 In its submission to the FC 14, the CAG similarly highlighted the problems in existing budget practices of states which regularly resulted in excess expenditure over grants and appropriations, excessive reliance on supplementary grants due to unrealistic budgeting, and large amounts of unused funds. Along with the need for a uniform code for object heads, the CAG also recommended that a separate object head for annuity payments under PPP should be set up. The CAG also stressed the need for strong internal audit systems in states preferably backed by legislation. It was highlighted that internal control systems in states needed to be strengthened to ensure proper monitoring of public resources and compliance with applicable statutes and regulations.
- 4.25 It should be noted that a similar analysis of audit reports on state finances was done by the FC XIV for an earlier reference period. The shortcomings highlighted in the FC 14 report were almost identical to the ones mentioned earlier including misclassification of revenue and capital expenditure; booking on an average 15 per cent of the total expenditure under the ambiguous minor head '800-other receipts/expenditure; and the practice of transferring funds from Consolidated Fund of states into PD accounts. Another observation was the March rush of states i.e. the tendency of states to rush to spend at the end of the financial year to prevent lapse of funds in a cash based accounting system.
- 4.26 In this context, the FC 14 had recommended that there should be prompt follow-up on the observations made in state audit reports while preparing of state accounts. Additionally, the Commission had also recommended that there should be strict compliance with the timelines prescribed for the laying of accounts before the state legislatures. However, there has been limited adherence to both of these recommendations:
 - i. As is evident from the earlier analysis, there has been no significant change in the issues being highlighted in audit reports on state finances indicating that the states concerned have not been taking action on the prior observations made by the AG.
 - ii. An increasing number of states have not been placing their audited finance accounts before the respective legislatures as a result of which there is no public availability of aggregate state finance data for the last audited year. By July 2018, the finance accounts for 2016-17 of all the states had still not been placed reflected in the delays in publishing of aggregate state data such as RBI's report on study of state finances. It should be noted that this is the longest delay in public reporting of state data in recent times which is fairly concerning.

Summary and Recommendations

4.27 Some important classification and other changes have had a significant bearing on state level fiscal data. The abolition of the plan non-plan distinction has resulted in a simplification of the overly classified government expenditure data in India including state level fiscal data.

With the abolition of this distinction, some of the inefficiencies resulting from the misplaced belief that plan expenditure is somehow more important than non-plan expenditure are expected to be removed. Similarly, after the recommendations of the HLEC on Efficiency in Public Expenditure Management, some of the central transfers to states which used to bypass the state budgets and treasuries are now being routed through them.

- 4.28 For the formulation of macro-fiscal policy, state fiscal data are of critical importance. Various Committees and Commissions including the FCs have examined the maintenance of the state fiscal data system from time to time and have pointed to a number of deficiencies.
- 4.29 Audit reports of state finances have shown that there are a number of problems in the accounting and reporting of fiscal data by states which is often in violation of the accounting rules set by the respective states and the CAG. Given this backdrop, the chapter comprehensively reviews the major issues in the classification and accounting of fiscal data of state governments. It also provides a summary of the current state of reporting of state finances based on an assessment of the latest audit reports of state finances.

Some of the main deficiencies of state fiscal data may be listed as follows:

- a. Existing classification in major and minor heads has limited functional utility due to multiple amendments over time.
- b. Lack of uniformity in classification of different schemes under different major heads
- c. Reporting of Finance Accounts data only till the minor head is fairly problematic
- d. Limited standardization in object heads
- 4.30 In the backdrop of these issues, the LMMHA Committee recommended that the current system of classification should be replaced by a multidimensional system of classification consisting of seven segments namely, Administrative, Function-wise, Programme cum scheme, Recipient, Target, Economic and Geographical segments.

5. Local Level Fiscal Statistics: Augmenting Decentralized Governance

5.1 Collecting and reporting data on local government in India is a significant challenge given the sheer size of the third tier of government in the country with over 2.4 lakh gram panchayats and over 4000 urban local bodies. The issues around data quality, collection and aggregation have been recorded in a fragmented manner across the reports of Union FCs (starting from the Eleventh), State FCs and AG reports on states' local governments. In particular, the work of FCs (both union and states) has been significantly impeded due to the absence of quality fiscal data on local bodies. Commissions have been unable to conduct detailed technical analysis required to frame their recommendations on fiscal transfers on account of issues with fiscal data of panchayats and municipalities. With the size of federal transfers to the third tier of government increasing over time, this lack of data raises serious concerns about expenditure management and accountability at the local government level. In this backdrop, the chapter reviews the existing issues regarding quality and reporting of local government data, and the recommendations made in this regard by different Commissions.

1. Issues in collecting, recording and accounting of local government fiscal data Union FC Reports

- 5.2 Starting from the Eleventh, every FC has underlined the challenge of assessing resource requirements for local bodies in the absence of comprehensive and reliable financial data on panchayats and municipalities. The FC 11 had highlighted the need for having proper accounts and an integrated database of accounts of all local governments to ensure better tracking and monitoring of funds. It had also stressed the need for bringing local governments under the purview of the CAG and made recommendations for regular audit reports of local governments to be placed in the concerned state legislatures. The data challenges have remained over the time which is reflected in all the successive FCs (subsequent to the Eleventh) reiterating the need for proper collation of data, maintenance of accounts, and regular audits.
- 5.3 It should be noted that none of the FCs from the Eleventh to the Thirteenth had been able to secure data on the finances of all the local governments for the purpose of their analyses reflecting the problems in aggregating local government financial data. To address the challenge involved in securing fiscal data for over 250,000 local governments, the FC 14 sought data in a simple format for a sample of local governments from different states. However, the data thus secured had a number of issues around quality and reliability making it meaningless for any analysis to estimate the resource gaps of local governments.
- 5.4 The failed data exercise of the FC 14 indicates that while there is some data being maintained in the accounts at the local government level, there are significant issues involved in the collection, recording and classification of the same. Moreover, it also indicates the gaps in institutional capacity and human capital constraints at the local level. This is also supported by the submission of local governments to the FC 14 namely highlighting their human resource problems specifically i) shortage of staff to provide public services and run administration, (ii) inadequate resources for carrying out mandated functions, (iii) need for greater empowerment of local bodies along with training and capacity building of officers (such as operating and maintaining IT infrastructure).

Comptroller and Auditor General

5.5 The CAG highlighted in its submission to the FC 14 that most states have rules and regulations regarding formats of accounts for both rural and urban local bodies. However, a number of states were not complying with the scheduled timelines set for completion of accounts. In the absence of a sound monitoring mechanism for the preparation and finalization of accounts, accounts of local bodies continue to reflect large arrears. CAG observed that in PRIAsoft (accounting software used by most states for compilation of panchayat accounts), 38 per cent of the registered gram panchayats had not closed their annual accounts for 2012-13 as of February 2014. Similarly, it was noted that 43 per cent and 36 per cent gram panchayats had not closed their accounts for 2010-11 and 2011-12, respectively, as of February 2014.

State FCs

5.6 State Finance Commissions (SFCs) across states have often underlined the capacity constraints that exist at the local government level. In this regard, their recommendations to different Union FCs have included requests for resources to fund municipal cadres, establishment of training institutes and IT infrastructure. Additionally, they have recommended FCs to provide support for preparation of simplified accounts and data formats, benchmarking of basic services and setting up of data collection centres in states. A state-wise analysis of local government data challenges identified by different SFCs in their latest reports has been provided in the table below.

Table 5:1 Data issues faced by SFCs: A summary*

Sl. No.	States / Latest SFCs	Data Challenges
1	Andhra Pradesh (3 rd) (2005-06 to 2009-10)	The SFC 3 observed that starting from the SFC 1 towards the SFC 3, the <i>non-availability of statistical data</i> continued to be the major problem faced by all the SFCs. For instance, the SFC 1 could not find the details on the various criterion used for the funds devolution. The SFC 2 similarly, faced the problem of non-availability of proper data from recommending devolution of funds. The SFC 3 says that it could not submit its final report as per its ToR due to <i>non-receipt of information</i> from the Panchayat Raj Bodies and Municipalities. Therefore, the data deficiency relating to Rural and Urban Bodies is the biggest challenge faced by all the SFCs.
2	Assam (5 th) (2015-2020)	The SFC 5 observed that the <u>continuity of efforts at</u> <u>monitoring</u> , <u>implementation</u> , <u>collection</u> , <u>compilation</u> <u>and updation of data is lost</u> between the two successive SFCs. This is the main challenge before the new SFC due to non-permanent SFC cell in the State. The permanent SFC cell could provide updated data when a new SFC is appointed. But in actual practice this has not happened because a permanent SFC cell is yet to be put

Sl. No.	States / Latest SFCs	Data Challenges
		in place and the temporary <u>SFC cell is neither properly</u> <u>staffed nor fully equipped</u> to meet the challenge. As a result when a new SFC assumes office <u>a lot of time get</u> <u>lost in collecting basic data</u> which could have been collected, compiled and updated much earlier had there been a permanent SFC cell in the Finance Department.
3	Bihar (5 th) (2015-2020)	Nothing highlighted
4	Chhattisgarh (2 nd) (2012-13 to 2016-17)	The SFC 2 observed that in the <u>absence of a proper and effective institutional mechanism</u> at State level, the Commission could not get the <u>information and data</u> required for study and analysis. The Commission suggested that <u>development of database</u> for future SFCs through a permanent SFC cell in finance department is the necessary for timely submission of SFC Reports.
5	Gujarat (2 nd) (2005-06 to 2009-10)	The Commission observed that the <u>information and data</u> at apex level with regard to Panchayats was either not available or was available in a highly unorganised manner. Also, there was hardly any response from the concerned departments like Finance, Panchayat and Urban Development on <u>availability of data in record</u> from the previous SFC for starting the working of the 2 nd SFC.
6	Haryana (4 th) (2011-12 to 2015-16)	The Commission observed that <u>extensive data and information on finances</u> , services, structural composition and other important aspects of local bodies in the records of previous SFCs were not made available. Therefore, the SFC 4 wasted a lot of valuable time in redesign the necessary formats and questionnaires in order to get <u>primary and secondary data</u> . The Commission also observed that there has been <u>no central agency at the State level</u> to collect, compile, process and analyse the statistical data. There has been serious problems in getting <u>dependable and authentic data on local finances</u> , civic services and other aspects from the departments of Panchayats and ULBs. So, there has been a serious need for <u>strengthening of the database</u> , suggested by the Commission.
7	Karnataka (3 rd) (2008-09 to 2012-13)	The SFC 3 observed that the <u>required data was not</u> <u>readily available</u> and therefore had to adopt a strategy to undertake <u>data entry</u> pertaining to PRIs at the district level and had to chalk out a time bound programme to accomplish it. The flow of data from the districts was not

Sl. No.	States / Latest SFCs	Data Challenges
		as expected and it took about six months to made data available before the Commission.
8	Kerala (5 th) (2016-17 to 2020-21)	Compared to the first three SFCs, the ToR of the SFCs 4 and 5 contained more issues requiring <i>elaborate exercise and collection of data</i> from the Local governments.
9	Maharashtra (3 rd) (2006-07 to 2010-11)	The SFC 3 faced a number of <u>difficulties in collecting</u> <u>data</u> for the use of the Commission. The Commission had to collect separately, data relating to number of properties, demand for water connections etc. Also, <u>financial data from State departments</u> were not readily available. Apart from financial data, data on physical levels of service was not readily available. Therefore, the Commission felt the need for the <u>creation of a unified</u> <u>database</u> as a matter of prime urgency.
10	Odisha (4 th) (2015-16 to 2019-20)	The Commission observed certain issues related to <i>information from LBs</i> on their finances and functions. The response from LBs was poor and not encouraging for the Commission. There was absence of any <i>credible data or any accepted benchmark</i> to determine the critical gaps in different sectors.
11	Punjab (4 th) (2010-11 to 2014-15)	The SFC 4 Report says that the <u>technical and</u> <u>managerial skills</u> possessed by the local bodies are extremely inadequate in terms of creating <u>reliable</u> <u>database</u> for timely study of local body's financial positions.
12	Rajasthan (4 th) (2010-11 to 2014-15)	The Commission observed that an <u>updated and</u> <u>authentic database is the prerequisite</u> for preparation of any development plan. It maintained that <u>maintenance</u> <u>of records and data</u> is woefully poor rather chaotic in Local bodies in Rajasthan. It suggested that the State government should evolve a <u>comprehensive system of collecting, compiling, managing and monitoring</u> the PRIs and ULBs finances regularly, and the basic data should be updated and stored regularly.
13	Sikkim (5 th) (2020-21 to 2024-25)	Nothing highlighted
14	Tamil Nadu (5 th) (2016-17 to 2020-21)	The SFC 5 Report says that 'in spite of the best efforts by the Commission, the <i>quality of data</i> remains a cause for concern, and the Commission tried to improve the data by having sample checks done either directly by the Commission or through the Directorate of Local Fund

Sl. No.	States / Latest SFCs	Data Challenges	
		Audit, the respective Heads of Department and in some cases through external agencies. The Commission has also cross checked the data with other available sources. In case of conflict of figures, the source which is more authentic and based on better technical supervision has been taken into account".	
15	Tripura (3 rd) (2009-10 to 2014-15)	The Commission observed that <u>timely availability of</u> <u>data</u> is a matter of concern for the SFC's effective working.	
16	Uttarakhand (3 rd) 2011-2016	The SFC 3 observed that there are <u>serious data gaps</u> which make it difficult to arrive at a proper assessment of the existing status, needs and requirements and identify gaps in delivery of services, and suggested <u>setting-up of proper monitoring systems</u> .	
17	West Bengal (4 th) (2015-16 to 2019-20)	The Commission faced the difficulty of non-availability of disaggregated data on population, area etc. up to GP level from the 5 Panchayats and Rural Development Department which could not be made available by the Census Directorate. Maintenance of database related to Local bodies for the use of future SFC was suggested by the Commission.	
* Summary of latest SFC reports of 17 states Source (Basic data): Various SFC Reports			

Accounts and Audits: Recommendations of Union FCs

FC 11

5.7 The FC 11 was the first to highlight the need for improvement in both local government audits and accounts, recommending that the CAG should be responsible for the overall control over the maintenance of accounts and audits of all tiers of rural and local bodies. It had recommended that the CAG audit reports on local bodies should be placed with the legislatures. Additionally, the FC 11 proposed grants to states for the compilation of accounts and creation of a database on local finances. However, only 30 per cent utilization of this grant amount was reported by the Ministry of Finance to the FC 12.

FC 12

5.8 FC 12 had included creation of databases and maintenance of accounts through the use of modern technology and management among the high priority expenditure areas for local governments. However, in the absence of proper costing data, the Commission had not made specific allocations for different expenditure, giving the states to earmark expenditure to local bodies as per their assessment of expenditure requirements.

FC 13

- 5.9 The FC 13 had recommended that the local audit departments should be strengthened through capacity improvements and hiring of personnel. Additionally, it had suggested that the finance accounts should include a separate statement (w.e.f 31st March 2012) indicating headwise details of actual expenditures under the same heads as used in the budget for both PRIs and urban local bodies. Specifically on data, the Commission had noted that the lack of audited comparable data across local bodies hindered a proper utilization of the same by SFCs. It further underlined the limited progress made on the recommendations of the FC 11 and FC 12 with regards to the creation of a database and better maintenance of accounts. In this context, an alternative approach was used to incentivize states to effectively decentralize via the channel of performance grants. Among the nine conditions that needed to be met by a state by the end of the financial year to be eligible for FC 13 performance grants, the following two pertained with audits and accounts:
 - i. The state government had to put in place a supplement to budget documents for local bodies in the framework and format proposed by FC 13. Further, they were expected to ensure that urban local bodies maintained accounts in the format as suggested by the Commission. As proof of this, the governments were expected to submit the relevant budget supplement and also certify that the FC recommended accounting system had been introduced in rural and local bodies.
 - ii. Each state was expected to ensure that an audit system was in place for all local bodies, with CAG made responsible for technical guidance and support of the local audit. The Annual Technical Inspection report as well as Annual Report of the Director of Local Audit had to be placed before the state legislature. Certification from CAG was required to show compliance with this condition.
- 5.10 Impact of incentive grants: In its submission to the FC 14, the CAG observed that one of the conditions for rural local bodies and municipalities to avail the performance grant was that the accounts maintained should be consistent with the accounting and codification frameworks of the Model Panchayati Raj Accounting System and National Municipal Accounts Manual respectively. CAG observed that most states had self-certified the adoption of the accounting framework, but the actual maintenance of accounts still needed a lot of improvement.

FC 14

- 5.11 The FC 14 also reinforced the need for better accounts maintenance and audit. The FC recommended that the accounts should distinctly indicate revenues from own taxes and non-taxes, assigned taxes, devolution and grants from the state, grants from FC and grants from other agencies. It also recommended the continuation of technical guidance and support arrangements provided by the CAG. Further, FC 14 also retained the performance component of grants to address the following issues: (i) making available audited data on all local governments, and (ii) improving own revenues of local governments. To be eligible for grants:
 - i. Gram panchayats would have to submit audited annual accounts that relate to a year not earlier than two years preceding the year in which gram panchayat seeks to claim the performance grants. It will also have to show an increase in own revenues over the preceding year, as reflected in the audited accounts.
 - ii. To be eligible the urban local body would have to submit audited annual accounts that relate to a year not earlier than two years preceding the year in which it seeks to claim

the performance grant. It would also have to show an increase in own revenues over the preceding year, as reflected in these audited accounts. In addition, the urban local body needed to publish the service level benchmarks relating to basic urban services each year for the period of the award and make it publically available.

Status of all recommendations

5.12 CAG is providing technical guidance and support to primary auditors on local finances in the states. In the submissions to the FC 14, CAG had noted that audit reports were being submitted to the government or legislature in 21 states, with the first audit report under preparation for the remaining five states at that time. In the period from 2011-12 to 2012-13, 17 states had given the mandate of technical guidance and support to CAG. It was underlined that with the help and guidance of the CAG there was some system improvement in the audit of local bodies by the primary auditors, but there was still a vast scope for further improvement

Summary and Recommendations

- 5.13 The CAG highlighted in its submission to the FC 14 that most states have rules and regulations regarding formats of accounts for both rural and urban local bodies. However, a number of states were not complying with the scheduled timelines set for completion of accounts. In the absence of a sound monitoring mechanism for the preparation and finalization of accounts, accounts of local bodies continue to reflect large arrears. CAG observed that in PRIAsoft (accounting software used by most states for compilation of panchayat accounts), 38 per cent of the registered gram panchayats had not closed their annual accounts for 2012-13 as of February 2014. Similarly, it was noted that 43 per cent and 36 per cent gram panchayats had not closed their accounts for 2010-11 and 2011-12, respectively, as of February 2014.
- 5.14 SFCs have compiled local level data pertaining to their states but these compilations show considerable irregularity in terms of timeliness and non-uniformity in the application of concepts and definitions relevant for compiling fiscal statistics. Most SFCs highlight non-availability of suitable disaggregated local level fiscal data as a major handicap for examining the state of fiscal health of the local bodies in their respective states.
- 5.15 CAG is providing technical guidance and support to primary auditors on local finances in the states. In the submissions to the FC 14, CAG had noted that audit reports were being submitted to the government or legislature in 21 states, with the first audit report under preparation for the remaining five states at that time. In the period from 2011-12 to 2012-13, 17 states had given the mandate of technical guidance and support to CAG. With the help and guidance of the CAG there has been some improvement in the audit of local bodies by the primary auditors, but there is still a vast scope for further improvement.
- 5.16 Each state government should publish on an annual basis, a consolidated statements separately for the rural and urban local bodies of the state ensuring uniformity in classification and presentation by individual local governments as consistent with CAG's technical guidance.

6. Granular Fiscal Data: Realizing Potential

6.1 ToR 3 of the Committee relates to the "compilation of granular data from primary sources and recommend suitable measures to establish/revamp system for (i) processing and (ii) periodic audit through deep drive of integrated system for and recommend a nodal agency as data repository". This requires consideration of a much larger data universe than just the budgetary data at the central, state and local levels. The potential of granular data is now unfolding in an explosive way in the context of the newly established digital platforms. Granular fiscal data have significant implications as inputs to individuals, firms, institutions and governments in their decision making.

Understanding Big Data

- 6.2 Ohlhorst (2013) defines data as "...everything that is experienced, whether it is a machine recording information from sensors, an individual taking pictures, or a cosmic event recorded by a scientist" According to the dictionary meaning (Oxford Dictionary). Big Data is made up of "extremely large data sets that may be analysed computationally to reveal patterns, trends, and associations, especially relating to human behaviour and interactions." Big Data originate in transactional data collected through data streaming on platforms such as Google, Facebook, YouTube, and Amazon. Big Data can be captured by various means such as surveys, census, web-based reporting, administrative records, satellite images, external open sources etc. Big Data enables collection of audio, video, text, and digital data. These data may be structured, unstructured, or semi-structured.
- 6.3 Technologies/ concepts which come under the umbrella of Big Data include Business Intelligence (BI), data mining, statistical application, predictive analysis and data modeling.
- 6.4 Big Data are gathered in an unstructured form to begin with. At different stages of processing this data, it becomes structured, anonymized and aggregated. It gets classified in different categories which may be of value to both businesses and governments. In developing Big Data platforms, considerations may include the following:
 - 1. Structure of data (structured, unstructured, semistructured, table based, proprietary)
 - 2. Source of the data (internal, external, private, public)
 - 3. Value of the data (generic, unique, specialized)
 - 4. Quality of the data (verified, static, streaming)
 - 5. Storage of the data (remotely accessed, shared, dedicated platforms, portable)
 - 6. Relationship of the data (superset, subset, correlated)
- 6.5 Five concepts have become associated with Big Data namely volume, variety, velocity, veracity and value. Volume refers to the quantity of generated and stored data. Variety refers to the type and nature of data. Velocity refers to the speed at which data are generated and processed. Veracity refers to the quality of data which can vary considerably and affect the accuracy of analysis. Value refers to the overall utilization of Big Data.
- 6.6 Managing Big Data requires considerable investment of resources in order to meet both the cost of storage platforms and its subsequent processing. A major step in utilizing the information content of this data is to develop the necessary algorithms. With the evolution of Big Data platforms, the associated algorithms used for analytics are also evolving. Dealing with

large data sets requires search and classification algorithms. New algorithms are often self-learning algorithms providing insights for immediate use. With these algorithms, machine learning and development of artificial intelligence have become possible.

- 6.7 The volume of Big Data is growing progressively. According to Wikipedia¹³, "The world's technological per-capita capacity to store information has roughly doubled every 40 months since the 1980s; as of 2012, every day 2.5 exabytes (2.5×1018) of data are generated. Based on an IDC report prediction, the global data volume will grow exponentially from 4.4 zettabytes to 44 zettabytes between 2013 and 2020. By 2025, IDC predicts there will be 163 zettabytes of data."
- 6.8 A major issue in managing Big Data is to provide regulation for maintaining data privacy. Data privacy is of considerable importance and major controversies have arisen concerning regulations relating to data privacy. It has become significant in the context of economic and commercial power that can be derived from Big Data. Managing privacy is effectively both a technical and a sociological problem, and it must be addressed jointly from both perspectives to realize the promise of Big Data. Barman (2018) observes: "Data governance is another major issue. It includes laying down standards for maintenance of data, information technology (IT) architecture, and business continuity to ensure integrity and availability of these data."
- 6.9 In India, advanced technologies have facilitated governments to access Big Data. This includes geographical information systems (GIS); satellite remote sensing; broadband connectivity covering all gram panchayats; and GSTN for indirect taxes. Most government offices are digitalised and access to information online is widespread. Examples of sources of gathering Big Data may be financial transactions, smart instrumentation, mobile telephony etc.
- 6.10 Big data including big fiscal data require massive investment of financial and human resources. Entities such as Google and Amazon are using Big Data for massive commercial purposes. The size of the private sector entities based largely on technology and management of Big Data has become larger than the size of a number of countries. The investment required in adequately exploiting the potential of big data is massive. The central government needs to earmark a certain budgetary allocation for its data and information system. So far, statistics and information have been given relatively low priority. In future, these may require the highest governmental priority.

Managing Big Data: Some International Initiatives

6.11 Many advanced tax administrations are moving towards big data management for cost effective solutions. The US IRS's Research, Analysis and Statistics Division uses big data techniques to enable advanced analytics, such as econometric modelling, forecasting and compliance studies on massively large datasets. UK HMRC has also replaced its conventional debt processing systems with an innovative IT solution capable of mass customising debt collection interventions based on insights into customer behaviour - Analytics for Debtor Profiling and Targeting (ADEPT). ADEPT is a closed loop 13.5 terabyte big data analytics system, with a debt management system and a decision engine. It automatically combines data from 20 internal and external systems and monitors a wide variety of changes that affect up to a million debts each day. Debt information such as payments made or missed, records of

-

¹³ https://en.wikipedia.org/wiki/Big data?action=edit&oldid=854006873&wteswitched=1

notes from the field force, and letters returned as undeliverable are integrated with socio-demographic and other data. ADEPT transforms the data and creates a single source of business intelligence for debt management. By integrating ADEPT's big data approach with legacy batch-processing, HMRC achieves flexibility and speed while simultaneously maintaining the resilience of business critical systems that thousands of HMRC staff rely on to do their jobs.

- 6.12 The Australian Government Information Management Office (AGIMO) uses big data and its associated analytical tools to develop better policies and deliver better services without compromising the privacy rights of the public. The Australian Taxation Office (ATO) has also started working on the new Data Analytics Centre of Excellence to use vast volumes of data captured by various government agencies. The Big Data Working Group is to work in conjunction with ATO's Data Analytics Centre of Excellence to deliver on a set of guidelines and initiatives to help government agencies take advantage of big data.
- 6.13 Statistics Denmark is a global leader in producing statistics based on administrative data. Since the early 1970s, it has gradually replaced traditional questionnaire censuses with register-based censuses, in which census data are collected using administrative data. Today, Denmark can conduct censuses at minimal cost; the total cost of the 2011 official census was only about US\$150,000. Statistics Denmark also uses administrative data to produce other key statistics, such as education, unemployment, income (national accounts), environmental accounts, and business statistics.
- Finland has used administrative data, including VAT data, to improve efficiency and 6.14 data quality. Statistics Finland has increased cost-effectiveness and enhanced data coverage while decreasing enterprises' reporting burden. They believe that further improvements could be realized if their cooperation with the tax authority could result in the tax authority taking statistical needs into account in selecting data to collect. VAT data are the main source for monthly business turnover. All enterprises with an annual turnover of over EUR 8,500 are covered and as a result 93 percent of enterprises accounting for an estimated 99.8 percent of turnover report their VAT data monthly. In addition to primary production, all commercial sales of products and services are subject to the VAT. VAT and Pay As You Earn (PAYE) data are also used to calculate wages and salaries (manufacturing, trade, services and construction), monthly GDP, and the business sector in quarterly national accounts. They are used to expand coverage and for quality checks in the Business Register, structural business statistics, commodity statistics, labor cost statistics, and the index of industrial output. VAT and PAYE data are used in the compilation of short-term business statistics since 1999 to comply with the 1998 EU Regulation on Short-Term Business Statistics (1168/98). Since the 2010 tax reform, this extensive data set has been known as periodic tax return data.

Government Digital Initiatives

6.15 At any point of time, billions of transactions are taking place which have fiscal implications. Thus, in each act of purchase/ sale, inputs and outputs bearing taxes, a set of critical data is being generated. Government ministries and departments are undertaking expenditures at all the three tiers/ levels of government in India, namely, central, state and local. After suitable anonymization, compilation and aggregation, this vast data can potentially be made sharable to various stakeholders. Two important sources of granular fiscal data are PFMS

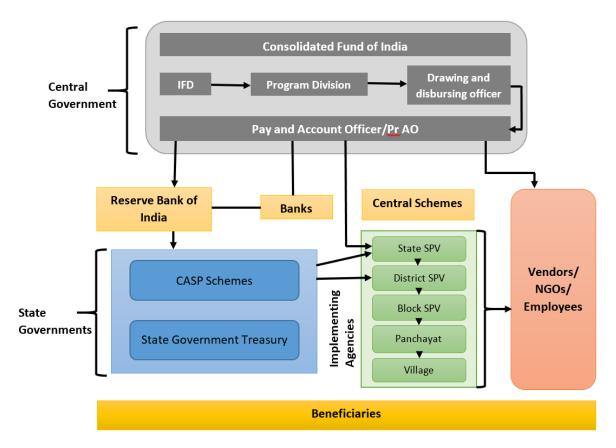
- and GSTN. Hitherto capturing all these transactions would have been extremely difficult and prohibitively costly. But with the setting up of the GSTN and PFMS and similar other platforms, capturing such data at suitable levels of aggregation and frequency now appears to be feasible.
- 6.16 Access to such data relating to government operations at the central, state and local levels can facilitate policy analysis, forecasting, and determining responses to unanticipated economic changes in a timely and effective manner. The quality of analysis undertaken by independent researchers can also be augmented by access to such data. Availability of powerful data analytics tools and setting up of new organizations and institutions have opened up unprecedented opportunities for capturing, compiling, organizing, publishing and analysing these fiscal statistics.
- 6.17 The PFMS captures data relating to intergovernmental fiscal transfers, both in terms of payments and receipts, payment of states' and local bodies' shares in central taxes, flow of grants of different kinds from any of the public accounts and their utilization by the recipients. The GSTN captures transaction level data having macro-fiscal implications. The information about all transactions happening in the production process which eventually lead to consumption could signal the growth in the economy. However, sharing of this data is a critical issue.

Public Finance and Management System

- 6.18 The PFMS captures government expenditure data and to some extent, non-tax revenue data. This data can be used to compile appropriately classified and aggregated fiscal data at suitable levels of aggregation and frequency. The PFMS is a web-based online software facility, developed and implemented by the office of CGA with technical support of NIC. The primary objective of PFMS is establishing and tracking an efficient fund flow system for the governments. PFMS provides various stakeholders with a real time, reliable and meaningful management information system and an effective decision support system.
- 6.19 PFMS is integrated with the banking network in the country. This provides the PFMS the unique capability to push online payments to almost any beneficiary/vendor having account in any bank across the country. This interface covers the Core Banking System (CBS) of all Public Sector Banks, Regional Rural Banks, major private sector banks, Reserve Bank of India, and India post and Cooperative Banks.
- 6.20 PFMS-Core Banking Solution Interface facilitates online validation of beneficiaries, and Agencies' bank account details. Electronic payment files are generated through PFMS for three modes of payments, viz. Print payment Advice (PPA), Digital Signature Certificate (DSC) and Corporate Internet Banking (CINB). At present, PFMS –CBS interface is operational with Public Sector Banks (26), Regional Rural Banks (50), and private sector banks (10). PFMS also has an interface with India Post and the RBI.
- 6.21 The PFMS facilitates improved financial management of Central government Schemes to manage timely releases and monitoring of the usage of funds including information on its ultimate utilization. The PFMS now covers all schemes of the Central Government. Important among these are the MNREGS payments, the Indira Awas Yojana and (IAY) payments. E-IGAA facilitates State Government payments through RBI advices across Ministries.

6.22 PFMS also serves as a non-tax portal through the Non Tax Receipts Portal (NTRP). One stop Government e –Market place (GeM) facilitates online procurement of common use Goods and Services required by various government departments/organizations/PSUs. It is integrated with PFMS for facilitating the e-payment of bills received online through GeM portal by the respective Pay and Accounts Offices. PFMS treasury integration has been completed for a large number of states. Chart 6.1 details the fund flow management system of the PFMS.

Chart 6.1 PFMS – Financial Network



Source (basic data): Adapted from: PPT on PFMS, "The North East Regional Workshop on Direct Benefit Transfer" (Imphal, 21st November 2016) https://dbtbharat.gov.in/data/events/PFMS_Imphal.pdf

6.23 The MoF in the central government under the Central Scheme for Treasury Modernisation has mandated compulsory interface of State Treasury Systems with PFMS. For this purpose, an interface for sharing data with State Treasuries has been developed in PFMS. This facilitates the tracking of utilization of funds transferred either through the State Consolidated Fund or Implementing Agency route for all Central Schemes being implemented in the states. Funds transferred from Central Ministries are tracked at each successive stage with the help of PFMS, starting with the initial release – Core Banking Solution (CBS) interface. Table 6.1 indicates progressively increasing interface of the PFMS in the state treasuries.

Table 6:1 PFMS-Treasury Interface

Status	States	Remarks
Fully interfaced (10)	Assam, Kerala, Maharashtra, Odisha, Puducherry, Jharkhand, Uttar Pradesh, Bihar*, Rajasthan*, Madhya Pradesh*	All schemes not fully mapped * Data for 2015-16 not yet received
Partially interfaced (15)	Punjab, Goa, Haryana, West Bengal, Andhra Pradesh, Telangana, Arunachal Pradesh, Chhattisgarh, Gujarat, Himachal Pradesh, Manipur, Meghalaya, Sikkim, Tamil Nadu, Uttarakhand	Mapping of schemes Setting up of server Testing of data structures
Not interfaced (6)	Jammu and Kashmir, Karnataka, Mizoram, Nagaland, Tripura and Delhi	Data not have centralised servers/Other issues

Source: PPT. on Public Finance Management System (Ministry of Rural Development, GoI); https://rural.nic.in/sites/default/files/PFMS_PRC17Nov2017_0.pdf

- 6.24 The PFMS is now facilitating the implementation of the Direct Benefit Transfer (DBT) Scheme which was implemented by the central government from January 2013. It facilitates direct payments (Aadhaar enabled or via NEFT) to ultimate beneficiaries. The use of PFMS was made mandatory for payment, accounting and reporting under Direct Benefit Transfer, with effect from 1st April 2015. No payments under the Direct Benefit Transfer schemes (except PAHAL) are to be processed, unless the electronic payment files for such payments are received through the PFMS system.
- 6.25 In DBT, every Department/Ministry transfers funds electronically to individual beneficiary through PFMS. Implementing agencies transfer the cash components to beneficiaries through PFMS. In case where funds are transferred to State Government/Treasury, each Ministry has to coordinate and ensure that the cash component of each scheme is transferred through PFMS.

GSTN: A New Source of Granular Data

6.26 The GSTN has been set up as a special purpose vehicle to manage the IT related infrastructure demands of GST. The common GST portal developed by GSTN is meant to function as the front-end of the overall GST IT ecosystem. The IT systems of the CBIC and state tax departments are supposed to function as back-end and will handle tax administration functions such as registration approval, assessment, audit, adjudication, etc (Chart 6.2).

Harmonization of Business Autonomy of back-end systems of **Processes and Formats States and Centre** Common & Shared Centre/States IT Infrastructure Tax IT Systems Interfaces Approval of Registration Core Services Non-Statutory Functions

Assessment

Adjudication

above functions

Analytics and BI

Audit and Enforcement

Internal workflows to support

Refunds

Recovery

Statutory Functions

Chart 6.2 Role assigned to GSTN as IT interface

Source: GSTN (https://www.gstn.org/about-us/)

Information on Inter-State supply and

Registration

Returns Payments

cross-credit utilization

Helpdesk support

IGST Settlement

Analytics

- Data from the GSTN provide not only tax-related data but also a large amount of economic information. There has been a large increase in the number of indirect taxpavers under the GSTN. Many of the registrants and dealers have voluntarily chosen to be part of the GST, especially small enterprises that buy from large enterprises and want to avail themselves of input tax credits.
- GST seeks to establish a uniform interface for the taxpayer and a common and shared IT infrastructure between the centre and states. It will thereby integrate multiple tax department websites, bringing all the tax administrations (center, state, and union territories) to the same level of IT maturity, with uniform formats and interfaces for taxpayers and other external stakeholders. For taxpayers, GSTN provides a common and shared portal and caters to functions facing taxpayers, such as filing registration applications, filing returns, creating challan for tax payment, settling IGST payment (like a clearing house), and generating business intelligence and analytics.
- Preliminary analysis based on the GSTN, as summarized by Economic Survey 2017-18, has already provided a number of valuable insights regarding the Indian economy. Some of these are given below.
 - i. The distribution of the GST base among the states is closely linked to their Gross State Domestic Product (GSDP), allaying fears of major producing states that the shift to the new system would undermine their tax collections.
 - ii. New data on the international exports of states suggests a strong correlation between export performance and states' standard of living.

- iii. Data shows that the largest firms account for a much smaller share in India's exports than in other comparable countries, reflecting the economic significance of smaller firms in India's exports.
- iv. Internal trade is about 60 percent of GDP. This compares very favorably with other large countries.
- v. India's formal sector non-farm payroll is substantially larger than currently believed. Formality defined in terms of social security provision yields an estimate of formal sector payroll of about 31 percent of the non-agricultural work force. If formality is defined in terms of being part of the GSTN, the formal sector payroll is estimated at 53 percent.
- vi. The size of the formal sector (defined as being either in the social security or GST net) is 13 percent of total firms in the private non-agriculture sector but 93 percent of the total turnover.
- 6.30 The GSTN is a rich source of taxpayer information. Based on the GSTN, ES 2017-18 also points out that of the total turnover of firms covered under GST, business-to-consumer (B2C) transactions account for only 17 percent. The bulk of transactions are business-to-business (B2B) and exports, which account for 30-34 percent each.
- 6.31 About 1.6 million taxpayers (17 percent of the total) are registered under the composition scheme, the current threshold for which is fixed at Rs. 1.5 crore. They pay a small tax (1 percent, 2 percent or 5 percent) on their turnover and are not eligible for input tax credits. About 1.9 million (24 percent of total regular filers) registrants sized between the GST threshold of Rs 20 lakhs and the composition limit chose not to opt for the composition scheme and instead decided to file under the regular GST. Thus, more than 54.3 per cent (1.9/(1.9+1.6)) of those eligible to register under the composition scheme, chose instead to be regular filers.
- 6.32 Maharashtra, UP, Tamil Nadu and Gujarat show the largest number of GST registrants among the states. UP and West Bengal have seen large increases in the number of tax registrants compared to the old tax regime.
- 6.33 GSTN has also provided an idea as to the size of India's GST tax base. The RNR Committee had estimated a tax base of Rs. 68.8 lakh crore and the GST Council had estimated a base of Rs. 65.8 lakh crore. Current data based on GSTN suggest that the GST tax base (excluding exports) is Rs. 65-70 lakh crore. Data on the state-wise share of the total GST base shows that the top states are Maharashtra (16 percent), Tamil Nadu (10 percent), Karnataka (9 percent), Uttar Pradesh (7 percent), and Gujarat (6 percent). It is also seen that each state's share in the GST base is highly correlated (coefficient of 0.95) with its share in overall GSDP. As such, tax bases still seem to be in the biggest producing states.

International and Inter-State Trade

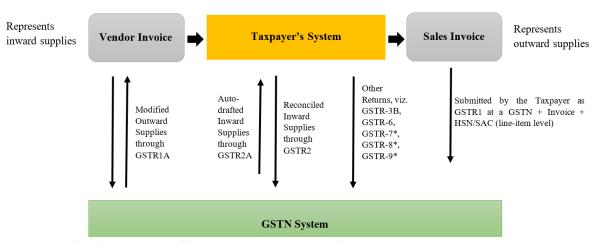
6.34 GSTN returns provide direct data on inter-state trade and its many related dimensions. Prior to the GSTN, such information on inter-state trade in India was simply not available. It is shown that five states namely, Maharashtra, Gujarat, Karnataka, Tamil Nadu, and Telangana, in that order, account for 70% of India's exports. Using this information, the state-wise distribution of international exports of goods and services can also be obtained.

- 6.35 The ES (2017-2018) shows that a state's GSDP per capita is highly correlated with its export share in GSDP (for the 20 major states). Available data based on GSTN on inter-state trade highlight the following features.
 - i. The five largest exporting states are Maharashtra, Gujarat, Haryana, Tamil Nadu and Karnataka;
 - ii. The five largest importing states are Maharashtra, Tamil Nadu, Uttar Pradesh, Karnataka and Gujarat;
 - iii. The states with the largest internal trade surpluses are Gujarat, Haryana, Maharashtra, Odisha and Tamil Nadu.

Compliance and Information flow under GSTN

6.36 The Economic Survey (2017-18) observes that three fundamental changes are expected for taxpayer compliance through the GSTN. First, processing of all compliance documents is going to be electronic implying no scope for manual compliance or submitting papers. Second, data flow will be two-way rather than one-way. Currently, taxpayers submit self-assessed returns without receiving any data from authorities. Under GST, taxpayers will submit and receive transaction level data (auto-drafted from vendor GSTR-1) to/from GSTN which they would need to process/reconcile. Third, data intensity will increase owing to the requirement of more detailed transaction level data to be submitted by the taxpayers. They will have to provide invoice/line-item level data (aggregated & dis-aggregated) that include fields such as HSN/SAC, Place of Supply (POS), Reverse Charge details, Credit Eligibility etc.

Chart 6.3 Illustrative compliance under GST



 $Sequential\ multi-step\ inter-dependent\ return\ filing\ process\ that\ needs\ constant\ sync-up\ with\ the\ GSTN\ System$

Source (Basic data): EY website; https://www.ey.com/in/en/services/ey-goods-and-services-tax-gst

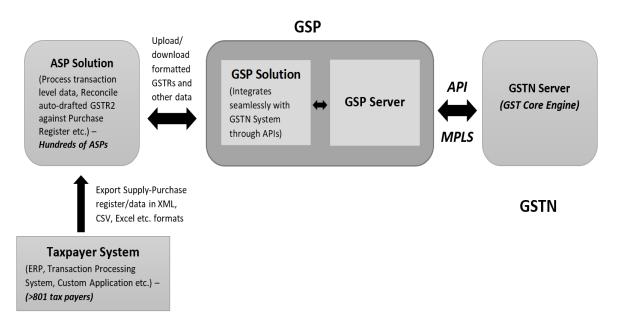
Methods of filing returns: the ASP-GSP framework

- 6.37 There are two ways taxpayers can access the GSTN System.
 - a) GST Common Portal set-up by GSTN (for every GSTIN there will be a log-in ID and password).

^{*-} yet to get notified

b) Automated connection with GSTN System through Application Programming interfaces (APIs). This mode can only be accessed through GSPs who are licensed by GSTN. The APIs cannot be consumed by taxpayers directly. However GSPs are mandated by GSTN not to store taxpayer data hence processing of transaction level data cannot be done at the GSP layer. The function of receiving data from the taxpayer, and converting it into a format that can be uploaded onto the GST portal and then supplying it to a GSP will be that of the ASPs. ASPs would focus on taking taxpayers' line item wise data on sales and purchases and aggregating, and converting it into a GST return which can be filed through the GSP. Thus the GSPs can receive data only from the ASPs, implying that they are only application providing automated (system-to-system) last-mile pass-through connectivity over secured network to the ASPs. However, due to the high transaction volume, complexity involved and constant synchronisation required with GSTN System, it will be extremely difficult, if not impossible, for large taxpayers, to do GST compliance by using the GST Common Portal route. A GSP may also offer the services of an ASP to meet a client's particular data processing requirements, and provide customized solutions to a large number of organizations. Chart 6.4 gives the ASP-GSP implementation framework.

Chart 6.4 ASP-GSP Implementation Framework



 $Source\ (Basic\ data):\ EY and\ \underline{http://taxguru.in/goods-and-service-tax/all-about-gst-suvidha-providers-gsps-with-faqs.html}$

Other Digitization Initiatives

6.38 There are some other digital platforms in addition to the PFMS and GSTN which generate valuable micro-level fiscal statistics.

CGA: Internal Audit

6.39 The Controller General of Accounts (CGA) has developed a risk based control framework in the form of Generic Internal Audit Manual to guide the internal audit

engagements. The manual facilitates the entire process by providing audit process, templates and guidelines. The organization is focusing on the use of Computer Assisted Audit Tools for greater transparency and accountability. Electronic Risk Assessment Software (e RAS), which serves as a diagnostic tool for internal audit has been developed in collaboration with the NIC. A Memorandum of Understanding (MOU) has been signed between Office of Controller General of Accounts and Institute of Internal Auditors (IIA)-India to provide convergence between the Office of CGA and IIA-India to establish cooperative processes within their areas of competence in the following areas.

- a. Sharing information and best practices, including those related to activities of internal auditors of government institutions and organization and their interaction;
- b. Exchanging analytical materials in the field of improving the system of internal auditing, and other pertinent information of mutual interest; for this purpose. The parties will establish the structure, format and procedures for data and information sharing;
- c. Exchanging initiatives with regard to the advancement of internal auditing in state institutions and organizations;
- d. Co-operating in the field of professional education and training with the aim to have qualified internal auditors in civil ministries of Government of India.;
- e. Developing proposals on making improvements to internal audit activities in Government institutions and organizations, including the process of encouraging internal auditors to attain recognized professional qualifications;
- f. Exchanging experience in the field of audit methodology, including application of the international standards for the professional practices of Internal Auditing;
- g. Co-operating within their areas of competence in other areas of mutual interest; and
- h. Encouraging cross-country experiences through international exchanges.
- 6.40 On the recommendations of the Public Accounts Committee (PAC), Audit Para Monitoring System (APMS) has been implemented for computerized monitoring of the pendency of Action Taken Notes (ATNs) of C&AG Paras at various stages. The application facilitates the submission/vetting of ATNs by their uploading on the portal at every stage. Another centralized computerized online monitoring system to check the status of the preparation and submission of the Explanatory Notes at every stage by various Ministries/Departments has been developed & operationalized.

Potential Uses of Big Data in Public Provision of Services

- 6.41 Until recently, big data has mostly been used for gathering tax intelligence in India. However, it has considerable potential for extending the reach of publically provided services including health, education, sanitation, maintenance of roads and infrastructure.
- 6.42 By using big data techniques, a much better micro-level information on status of health and health-related problems can be obtained by the government. Spreads of epidemics can be anticipated and checked in time. Instances of malnourishment can be pinpointed and remedied. Similarly, detailed micro level information on sanitation can be obtained.
- 6.43 Big Data analytics is already being used for healthcare in many advanced countries by providing personalized medicine, prescriptive analytics, predictive analytics and clinical risk intervention. Patient-wise health records are being developed aimed at capturing the entire lifetime of individuals so that those health records can be accessed at all times. Government's endeavours to combat major chronic diseases can also become far more effective by the use of

Big Data which can help in monitoring delivery and dispensation of services. Wearable digital technologies are also providing enormous amount of health records.

6.44 Similarly, Big Data can be used in a major way to improve education outcomes particularly in a country like India where a major challenge is to provide access to quality education at low cost in the face of tremendous shortage of teachers and institutions who can cater to the growing young age population in India. In the field of education, every single child's progress, talents and skills can be mapped to provide a much more productive career path for the individual and his contribution to the productivity of the society and working of the economy. New digital institutions and universities are now offering digital courses at competitive costs. Government initiatives both for providing education and training of teachers can also expand the reach of public provision of education in a massive way. Health insurance providers are utilizing Big Data to quantify the impact of social determinants of health such as food and TV consumption, marital status, purchasing habits etc. to make predictions on health costs and identify health issues of their current or potential clients.

6.45 Big data through surveillance of satellite can provide detailed information on the state of maintenance of roads covering expressways, state highways as well as the roads connecting rural areas and border towns.

Pension Data

6.46 Pension data are a critical component of government expenditure. They constitute government expenditures which are fully committed and constitute more or less a first charge on government expenditures. The dynamics of growth of pension expenditures is also on a footing that is different from other expenditure aggregates. In particular, the future flow of pension payments depends on the stock of existing number of pensioners, the retirement profile of existing government employees and the anticipated cycle of periodic revisions of pensions linked with revisions of salaries of government employees. As such, pension payment commitments can be forecasted through models that may be different as compared to forecasting methodologies for other budgetary aggregates.

6.47 The Central Pension Accounting Office (CPAO) has been working since the early nineties for Payment and Accounting of Central (Civil) Pensioners and Pension to Freedom Fighters etc. The primary function of CPAO is to issue Special Seal Authorities (SSAs) to the Cenral Pension Processing Centres (CPPCs) of Banks in the case of fresh and revision of pensions. It allows paperless movements of digitally signed e-Revision Authority from CPAO. A considerable number of pensioners (about 84 percent) have linked their Aadhaar numbers with their pension accounts & PPOs and they are in position to avail the facility of getting their life authenticated on line by using digital life certification (Jeevan Pramaan). A link to Jeevan Pramaan Portal has been provided on CPAO website to enable pensioners to use facility of Digital Life Certificate. For retiring employees, a link has been established with Bhavishya Portal of DP&PW to enable them to track status of their pension cases even before the case reaches CPAO. A link to CPENGRAMS (Centralized Pension Grievance Redress and Monitoring System) has also been provided for tackling complaints.

Summary

- 6.48 A vast amount of fiscal data at the primary and micro levels including third party data may all be referred to as 'granular fiscal data'. Until recently, this rich source of information remained unutilized/ underutilized for want of suitable access points where such data may become available without any privacy issues. New digital platforms such as the PFMS and the GSTN have the potential to provide granular fiscal data in rich detail. The sharability of such data with the larger body of users depends on anonymization, compilation and aggregation of such data. It also requires suitable government policy to make this data accessible for general public use. This should become available to all key participants in the working of the economy including individuals, firms, banks and other financial institutions, researchers and national and international governments.
- 6.49 Big Fiscal Data are currently being utilized for tax intelligence activities. However, in addition to augmenting tax compliance by using Big Data, there is considerable potential also to utilize these for making the provision of publically provided goods and services far more efficient. To some extent, the central government's DBT is an initiative in this direction. However, a fuller exploitation of the rich information content of granular fiscal data would only become feasible if considerable amount of resources are invested for this purpose.
- 6.50 Many private enterprises have invested heavily in exploiting Big Data in order to enhance their reach and profitability. Governments of the future are likely to invest substantial resources in generating, processing and analysing Big Data not only for policy formulation but also for providing vital services such as health and education as well as for economic activities such as agriculture and maintenance of infrastructure.

7. High Frequency Data: Gathering Momentum

7.1 Data on government finances are usually available through budgets on an annual frequency. But a good portion of fiscal data also become available at frequencies higher than the annual frequency. In particular, such data are available at monthly and quarterly frequencies. CGA, CAG and the RBI are important sources of high frequency fiscal data.

High frequency data can be used for monthly and quarterly modelling. These can become a tool for forecasting and anticipating economic trends and patterns so that policy intervention can be planned periodically within a fiscal year. High frequency data can also be used for understanding patterns of seasonality of fiscal data so that tax and expenditure planning can be improved.

7.2 CGA provides monthly data on salient aggregates of the central finances. Similarly CAG publishes fiscal data for various state governments at a monthly frequency. Both of these data sets are highly important for analysis, forecasting and fiscal policymaking. It may prove to be very valuable if Centre's fiscal data and states' fiscal data are compiled on a common platform and aggregate fiscal data pertaining to all states also become available at a monthly frequency. By studying seasonal revenue and expenditure pattern, governments can improve on their interventions to achieve the FRBMA targets along with other policy targets.

Sources of High Frequency Fiscal Data

7.3 Some of the currently available high-frequency data which can be readily used by analysts are summarized in Table 7.1.

Table 7:1 Some High Frequency Fiscal Data Series: An Illustrative List

#	Data indicators	Frequency	Source
1.	Data on Central Government Debt	Quarterly	Department of Economic Affairs
2.	Union Government Accounts at a Glance	Monthly	Controller General of Accounts
3.	State Accounts	Monthly	Comptroller and Auditor General of India
4.	Union Government Accounts at a Glance	Monthly	Monthly RBI Bulletin
5.	Combined Receipts and Disbursements of the Central and State Governments	Published monthly (Updations carried out twice a year in May and September)	Monthly RBI Bulletin
6.	Market Borrowings by the Government of India and State Governments	Weekly	RBI – Weekly Statistical Supplement
7.	Financial Accommodation Availed by State Governments under various Facilities (State wise) – under Occasional Series	Monthly	Monthly RBI Bulletin

#	Data indicators	Frequency	Source
8.	Investments by State Governments (in various funds)	Monthly	Monthly RBI Bulletin
9.	Market Borrowings by State Government (State wise)	Monthly	Monthly RBI Bulletin
10.	Auctions of Government of India Treasury Bills	Weekly	Monthly RBI Bulletin
11.	Yield of SGL Transactions In Government Dated Securities For Various Maturities	Monthly	Handbook of Statistics on the Indian Economy (Quarterly/Monthly section)
12.	Monthly Revenue Performance Report (on central indirect taxes from April 2012 till June 2017)	Monthly	Directorate of Data Management, Central Board of Indirect Taxes & Customs
13.	Disinvestment	Near Monthly	Department of Investment and Public Asset Management
14.	Statement showing the effective rates of State taxes/ GST on Petrol, Diesel, SKO (PDS) and Domestic LPG	Near Monthly/Occasional (as and when there are any revisions in any of the tax rates)	Petroleum Planning & Analysis Cell (PPAC)
15.	Central Excise and Customs Tariff Table	Near Monthly/Occasional (as and when there are any revisions in any of the tax rates)	Petroleum Planning & Analysis Cell (PPAC)
16.	Contribution of Petroleum Sector to Exchequer	Near Monthly/Occasional	Petroleum Planning & Analysis Cell (PPAC)

Source: (Basic data) MoF, RBI, CAG, CGA, PPAC, CBIC and FSC

Understanding Patterns of Seasonality of Fiscal Data

Concentration of expenditures as well as revenues in certain months of the fiscal year causes a fiscal imbalance. These seasonalities are different for expenditure and revenue flows, leading to an asymmetry. In a recent paper (Srivastava and Trehan, 2018), asymmetry is conceptualized as consisting of three inter-related aspects: (a) monthly pattern of unevenness measured against a norm of equally distributed monthly shares, (b) non-synchronization of pattern of unevenness of expenditures and revenues, and (c) fiscal year start-end (April and March) extreme departures from an evenly distributed pattern. This asymmetry has implications for the efficient management of government finances. Any excess of expenditures over revenues necessitates financing of the excess by accessing cash balances or short-term borrowing. Keeping excessive cash balances as well as borrowing-based financing involve costs. Should the two streams of flows be equally matched in all months, these costs would be zero. Thus, the larger the asymmetry between expenditure and revenue seasonalities, the higher would be the cost of managing this asymmetry. This asymmetry also has implications for the private sector and the available liquidity in the system. Government expenditures and

withdrawal of resources from circulation in the form of taxation affects both aggregate demand and cash in circulation in the system. Centre's asymmetry relating to revenues and expenditures, particularly the asymmetry relating to the pattern of release of states' share in central taxes and grants affect the pattern of asymmetry in state finances.

- 7.5 The central and state governments in India have subjected themselves to hard fiscal and revenue deficit targets through fiscal responsibility legislations. Not meeting these explicit targets involves loss of credibility of the concerned government. The rating agencies closely watch the performance of the government in meeting pre-stipulated deficit targets. However, close to the end of the financial year, governments often find that they are likely to miss the target. In such situations, they adopt ad-hoc means to show that the target has been met, particularly in terms of cash accounts, while without these conscious interventions, the target may be missed. Methods of achieving this include postponement of committed expenditures to the next fiscal year and extra-ordinary means adopted by revenue officials to induce advance payment of taxes that are to be refunded at the beginning of the next financial year.
- 7.6 There are some useful aspects of asymmetry in the monthly revenue and expenditure pattern that can be studied by examining monthly fiscal data. Srivastava and Trehan (2018) define unevenness as departure from evenness and asymmetry as the departure from symmetry. In this context, three aspects namely, unevenness over time, Non-Synchronization in patterns of Unevenness, and Fiscal year start-end Extreme Variations were considered.
- 7.7 Chart 6.5 shows the deviation of monthly shares of total revenue receipts from equally distributed monthly shares for the four political regimes namely NDA 1(2000-01 to 2003-04), UPA 1(2004-05 to 2008-09), UPA 2(2009-10 to 2013-14) and NDA 2(2014-15 to 2015-16). The case of equally distributed shares is depicted by the horizontal line passing through the value 0, i.e. the x-axis. The share of total receipts peaks in the month of September, December and particularly March indicating bunching of revenue receipts in these months. Few reasons explaining these trends relate to the calendar of advance payments, declaration of dividends by the public sector enterprises and finalization of their accounts in March and the general tendency of delaying disinvestment efforts towards the end of the fiscal year. This feature is common across regimes.

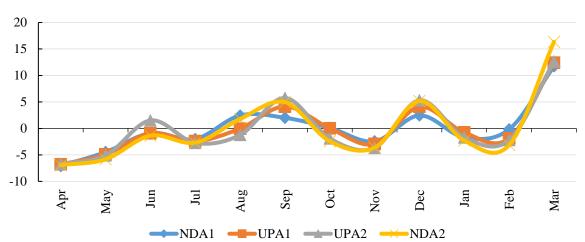


Chart 7.1 Pattern of Seasonal Unevenness: Total Receipts

Source: (Basic data) - Controller General of Accounts, Government of India, Authors' calculations

7.8 A study of seasonality pattern of receipts may help the government to align its expenditure patterns accordingly so as to minimize cash flow problems and reduce the need for

Ways and Means Advances and Overdrafts. These fiscal seasonality patterns also have implications for the availability of the overall liquidity in the system which the monetary authorities may be concerned about.

Heterogeneity in timing of release of monthly fiscal data

7.9 Fiscal data are getting generated all the time. But their compilation, classification into suitable categories and eventual publication on a website or in printed form is replete with instances of heterogeneous time lags. These time lags may be different for different series within the central fiscal accounts and between centre and states and local bodies. For instance, in obtaining data on the combined account of the central and state governments for the latest period, multiple sources need to be referred to. Monthly data for centre's accounts can be sourced mainly from the CGA while that for the individual states can be obtained from the CAG. The challenge is that the data from these two sources are released with heterogeneous time lags, making it difficult to prepare the combined account at any particular point in time. Although the RBI also provides annual fiscal data for states, it does so at different time frequencies and with different classifications which makes it incomparable with CAG data for states. These time lag issues often make data compilation incomplete or inconsistent. Actual compilation is usually postponed and the speed of compilation depends on the most delayed component of the fiscal data series. A modern digitized system of collection and compilation should minimize issues relating to long and inconsistent time lags.

Interface of High Frequency Fiscal and Economic Data

- 7.10 Apart from fiscal data, quite a number of other economic indicators are also available at monthly and/ or quarterly frequencies. In understanding the emerging economic trends, it is often rewarding to review fiscal and macroeconomic data together.
- 7.11 Trends in the overall and sectoral growth are of considerable interest to the policymakers as well as industry, but the related data is available at quarterly and annual frequencies only. High-frequency data, particularly monthly data, contains rich information that can be used in relation to their past variations to capture the direction of growth impulses within a quarter. Such data reflects considerable inter-sectoral variations, which might be used to take a view on which sectors are performing relatively better than the others.
- 7.12 A list of selected macroeconomic indicators capturing production, price, trade and monetary variables is illustratively given below:

Table 7:2 High Frequency Indicators

Output/Production	Monetary, Financial	Fiscal	Others
and Prices	and External sector		
Overall IIP	Bank credit (overall)	Central Government	Railway Traffic
		Finances (revenue,	and Earnings:
		expenditures and	Goods
		deficits)	
IIP Manufacturing	Agricultural sector	State Government	Railway Traffic
	Credit	Finances (revenue,	and Earnings:
			Passengers

Output/Production	Monetary, Financial	Fiscal	Others
and Prices	and External sector		
		expenditures and deficits)	
IIP Mining	Industrial Sector Credit	Central and State Government Market Borrowing	Cargo handled at Ports
IIP Electricity	Services Sector Credit	20110 Wing	Telephone Subscribers
Coal Production (volume)	Personal Loans		Broadband Subscriptions
Crude Oil Production (volume)	Housing Credit		Digital Transactions (Value and Volume)
Steel Production (volume)	Vehicle Loans		Passengers Carried by Air (domestic + international)
Petroleum Refinery Production (volume)	Deposit Rates		
Fertilizer Production (volume)	Lending Rates		
Electricity Production (volume)	Benchmark Bond yields		
Manufacturing PMI	Exports and imports of oil products		
Services PMI	Exports and imports of non-oil products		
Consumer Price Index	Global crude prices		
Producer Price Index	Crude prices (Indian basket)		
	Global commodity prices (coal, aluminium, iron ore, steel, copper)		
	FDI and FPI inflow/outflows		
	Exports and Imports of Services		

Source: Prepared by FSC

Summary

7.13 Fiscal data at a monthly frequency are available from a number of sources such as the DEA, MoF, CGA, CAG, the RBI and the PPAC. These data can also be aggregated to give

fiscal data at a quarterly frequency. Both these sets can be utilized for monthly and quarterly modelling of the fiscal aggregates. Such modelling is best done in a macro-econometric framework. In fact, a number of high frequency series indicating broad segments of the macro economy such as production/ output, prices, exchange and interest rates, external trade and monetary aggregates are already available. Utilizing these rich datasets, it is possible to develop analytical frameworks for understanding patterns of seasonality as well as for forecasting so as to anticipate unfolding economic trends and patterns with a view to designing appropriate and timely policy interventions.

7.14 One issue in utilizing high frequency data is heterogeneity in their release timings. Further, there is also an issue in relation to their aggregation so as to obtain corresponding annual magnitudes. There are issues of consistency between aggregated monthly or quarterly data and the corresponding annual estimates obtained independently.

8. Fiscal Data Coordination: Conceptualizing a Fiscal Council

8.1 ToR 1 of the FSC states

"To review the status on implementation of recommendations of National Statistical Commission on Institutional Mechanism for repository of Fiscal Statistics and subsequent committees of NSC to identify areas needing action for improving fiscal statistics"

Such an institutional mechanism is much needed in India but has not yet been put in place.

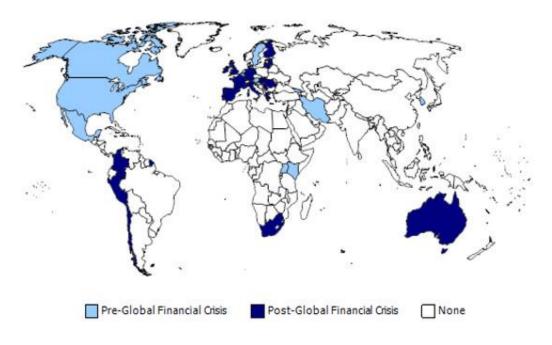
- 8.2 The analysis of the previous chapters shows that fiscal data emanate from multiple diffused sources and at multiple time frequencies. Governments at different levels and various institutions are involved in the collection, compilation, aggregation, and analysis of fiscal statistics. There are still a large number of issues of consistency, continuity, transparency, comparabilty, and timeliness. Fiscal data are critical for the formulation of fiscal policy as well as macro-economic policies. In the absence of reliable and timely fiscal data, these policy interventions tend to become sub-optimal. Many of these problems arise because there is no institution that can play an overarching role in compiling fiscal statistics emanating from various sources and institutions, maintaining long period consistent series over time, and sharing these with the potential users. Such an agency can also monitor various FRBM targets of the centre and the states while remaining neutral between the central, state, and local governments. Based on its own technical analysis of fiscal data, it can offer valuable guidance to governments at all levels and trigger cautionary signals and action points in a timely manner.
- 8.3 The National Statistical Commission (2001), headed by Dr. Rangarajan, had recommended the establishment of a data warehouse for fiscal statistics at the national level within the Department of Economic Affairs (DEA). Such an institutional mechanism was intended to collect, compile and store data generated and disseminated by various official agencies. This would have enabled building up a comprehensive database on Indian Fiscal Statistics covering data at both micro and macro levels. However, according to available information, no such initiative has been undertaken till date.
- 8.4 One reason why it did not take off could be due to the fact that government departments are essentially preoccupied with day to day operations. As such, these departments have not been able to devote enough time and resources to develop data warehouse. Also, there may be limited users of fiscal data in the DEA or the office of the CEA. The DEA may also be constrained in obtaining state-level fiscal data as they do not have the necessary institutional links with the state governments.
- 8.5 There is a need to identify a suitable organizational structure where compilation of fiscal data may happen so that it can be standardized and made publishable. Such an institution should be apex body of fiscal statistics coordinating the central, state and local governments as also the relevant institutions such as the RBI, CSO, CAG and CGA. There is also a need to conceptualise a suitable apex institution and for evolving a methodology for developing an interface between this apex institution and the various institutional and departmental sources of data in India's federal system of governance.
- 8.6 Internationally, countries have adopted various collaborative mechanisms for such inter-agency exchange of data and information. Sometimes, these exchanges are mandated by law in the form of statutes. Various inter-agency partnership agreements, memoranda of

understanding (MoUs), statements of practice, standard protocols, etc., supplement laws to ensure exchange of data or information. As an institution in many countries, Fiscal Councils have been setup.

Fiscal Council in India: Potential Role

8.7 Recent FCs have been suggesting the setting up of an autonomous Fiscal Council to play the role both of a fiscal data co-ordinator and fiscal policy advisor. The FRBM Review Committee headed by Shri N.K.Singh had also recommended this in 2017. The Review Committee had observed: 'by 2014, more than 80 countries (including several emerging economies) had adopted fiscal rules in some form or the other. Of these, more than 35 countries had constituted autonomous Fiscal Councils'. The number of Fiscal Councils in different countries has progressively increased in the world. A 2016 Update of the Fiscal Councils around the world shows its expansion in a significant part of the world covering almost all continents (Chart 8.1)

Chart 8.1 Fiscal Councils around the World



Source: IMF

- 8.8 Fiscal Councils serve as a counterpart to Monetary Policy Committees. Just as formulation of monetary policy has attained a degree of autonomy by the prevalence of Monetary Policy Committees across the world, independent Fiscal Councils may provide a degree of autonomy to the formulation of Fiscal Policies. In a recent assessment of the role of Fiscal Councils, IMF (2013) observes "Fiscal councils can promote stronger fiscal discipline as long as they are well-designed. The analysis points to a number of key features of effective fiscal councils: a strict operational independence from politics, the provision or public assessment of budgetary forecasts, a strong presence in the public debate (notably through an effective communication strategy), and an explicit role in monitoring fiscal policy rules."
- 8.9 Governments have become prone to making optimistic projections of tax and non-tax revenues thereby often missing the budgeted or legislated fiscal consolidation targets. One of

the tasks of Fiscal Council is to study the discrepancies between actual and forecasted growth of real GDP as well as fiscal aggregates. Fiscal Councils can become more objective in making these forecasts and thereby guiding fiscal policy aimed at promoting growth and meeting countercyclical targets.

- 8.10 Although the mandate and constitution of fiscal councils differs from country to country, they do have certain common features. The FRBM Review Committee (2017) makes reference to an IMF study on the subject which suggests that fiscal councils may:
 - "(i) contribute to the use of unbiased macroeconomic and budgetary forecasts in budget preparation (through preparing forecasts, or proposing prudent levels for key parameters),
 - (ii) identify sensible fiscal policy options, and possibly, formulate recommendations,
 - (iii) facilitate the implementation of fiscal policy rules, and
 - (iv) cost new policy initiatives".
- 8.11 The FC 13 had recommended the constitution of an independent review mechanism by the Centre to evaluate its fiscal reform process. It suggested that the proposed Fiscal Council should be an autonomous body, reporting to the Ministry of Finance, which should further report to Parliament on the matters dealt with by the Council. It recommended the establishment of a mechanism:

"to conduct an annual independent and public review of FRBM compliance, including a review of the fiscal impact of policy decisions on the FRBM roadmap. This review should present its findings concurrently with the annual budget and the medium term strategy ...it is imperative that such an institution be developed to assist the government in addressing its fiscal tasks in a professional, transparent and effective manner."

8.12 The FC 14 also noted that globally, several countries had constituted fiscal councils which help in monitoring and evaluating fiscal policies and management. These also create transparency by providing costing estimates of various programmes, and increase accountability of the Government. Accordingly, they expressed the view that:

"it is important to have an ex-ante evaluation of the fiscal implications of the budget proposals and, therefore, believe that it is essential to establish an independent fiscal institution for this purpose. This could be done through the establishment of a fiscal council by an amendment to the FRBM Act, similar to the one that enables the ex-post assessment by the C&AG......In the light of the above, we recommend an amendment to the FRBM Act inserting a new section mandating the establishment of an independent fiscal council on the lines indicated above to undertake ex-ante assessment of the fiscal policy implications of budget proposals and their consistency with fiscal policy and Rules..."

Proposal of FRBM Review Committee

- 8.13 The FCs have been recommending setting up a suitable institution to fillup a multidimentional gap in fiscal data co-ordination and analysis. FC 12 had recommended the setting up of a 'Research Committee' to conduct studies on issues of fiscal federalism.
- 8.14 The FRBM Review Committee headed by Shri N.K.Singh also recommended the setting up a Fiscal Council. The proposed functions of the Fiscal Council were specified to include the following:

- i. preparing multi-year fiscal forecasts;
- ii. preparing a fiscal sustainability analysis that makes projections on key fiscal indicators;
- iii. providing an independent assessment of the Central Government's fiscal performance and compliance with targets set under the Debt Act;
- iv. recommending suitable changes to fiscal strategy to ensure consistency of the annual financial statement with targets set under the Debt Act;
- v. taking steps to improve quality of fiscal data;
- vi. producing an annual fiscal strategy report which will be released publicly;
- vii. providing policy guidance to Central Government on any matter relating to fiscal policy where advice is sought;
- viii. advising the Central Government on whether conditions exist to permit a deviation from the targets established and make recommendations on the plan to return to the established targets;
 - ix. advising the Central Government on corrective steps to be taken if periodic review demonstrates non-compliance with any targets set under the Debt Act.
- 8.15 The Review Committee suggested that Fiscal Council may also prepare the Macroeconomic Framework Statement containing an assessment of the economy with respect to trends in the growth of Gross Domestic Product, public debt, fiscal balance and the external balance of the Union of India. Such a body will ensure that a robust and independent institution underpins the credibility of the macroeconomic fiscal regime in India.
- 8.16 The Fiscal Council was envisgaed as an autonomous body, under the aegis of the Ministry of Finance (Department of Economic Affairs) consisting of a Chairperson and two Members to be appointed by the Central Government. The Chairman and members should have significant experience in public finance, economics or public affairs. The Fiscal Council should be manned by specialists including economists, data scientists, statisticians and econometricians.
- 8.17 Following the Review Committee's recommendations, the central government's FRBM was amended in 2018. However, this amendment did not say anything about the Review Committee's recommendation of setting up of a Fiscal Council.

Fiscal Councils or Similar Bodies: Selected International Experience

8.18 Internationally, Fiscal Councils became more and more prevalent after the global financial crisis of 2007-08 which shook the confidence of the international community in maintaining public debt sustainability relyin largely only on various fiscal rules. Post crisis, many governments set up independent Fiscal Councils to provide a more robust institutional framework for the formulation of fiscal policy. Chart 8.2 shows the number of independent Fiscal Councils in the world as of 2016.

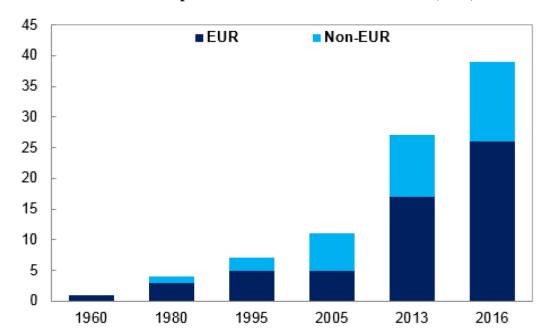


Chart 8.2 Number of independent Fiscal Councils in the world (2016)

Source: IMF Fiscal Council Dataset. Note: "EUR" is European, "Non-EUR" is non-European.

8.19 The IMF database on Fiscal Councils also provides a summary of the responsibilities of Fiscal Councils in different countries as also shown by Chart 8.3.

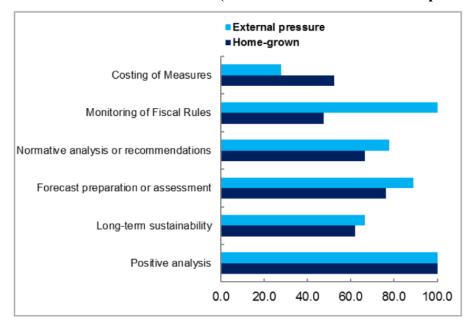


Chart 8.3 Fiscal Councils Remit (Percent of Fiscal Councils' Population)

Source: IMF Fiscal Council Dataset

8.20 The United Kingdom created an Office of Budget Responsibility (OBR) in 2010, comparable to a Fiscal Council, with a statutory status in 2011 to provide an independent and objective assessment of the country's public finances. OBR's functions include:

- providing economic and fiscal forecasts,
- evaluating the government's performance against targets,

- analysing the long-term sustainability of public finances, as well as analysing the balance sheet of the public sector,
- evaluating and identifying fiscal risks of relevance, and
- scrutinising the Government's costing of individual tax and welfare spending measures.
- 8.21 In the US, there is the Congressional Budget Office (CBO) which supports the Congressional budget process by providing independent analyses of budgetary and economic issues. The CBO is independent from the Executive and does not report directly to any Congressional Committee.

To achieve this, they provide the following:

- budgetary and economic forecasts or projections,
- cost estimates of all legislation,
- analysis of the President's budget, and
- evaluation of legislative action with consistency on consistent spending and revenue levels set by budget resolutions.

Irish Fiscal Council

- 8.22 Ireland, although a comparatively small economy, provides a good example of an effective Fiscal Council which was established in 2011. The Irish Fiscal Advisory Council is stand-alone statutory body that functions independently. It provides an independent assessment of official budgetary forecasts and proposed fiscal policy objectives. In particular, it performs the following functions:
 - assessing the macroeconomic and budgetary forecasts prepared by the Department of Finance.
 - assessing if the fiscal stance of the Government is conducive to prudent economic and budgetary management,
 - monitoring compliance of the Government's budget with the budgetary rule, requiring the budget to be in balance or surplus, and
 - assessing if any non-compliance with the budgetary rule is a result of 'exceptional circumstances'.

Need for a Fiscal Council: Proposed Role

- 8.23 Without a Fiscal Council or a comparable body, the status and utilization of fiscal data has remained highly unsatisfactory in India. Accordingly, a Fiscal Council may be considered broadly in line with the recommendations of the recent FCs and the FRBM Review Committee. Such a Council may play the roles of being (a) Fiscal Data Co-ordinator, (b) Fiscal Data Analyst, (c) Fiscal Consolidation Path Monitor, (d) Fiscal Aggregates Forecaster, and (e) Fiscal Policy Advisor.
- 8.24 The working of the Fiscal Council would be facilitated by signing of MoUs with a number of secondary fiscal data generators such as the DEA, Departments of Revenue and Expenditure, Department of Disinvestment, MoF, the RBI, the NAS division of the CSO, the CAG and CGA, as well as state and local governments.

Fiscal Data Coordinator

8.25 As a fiscal data coordinator, the Fiscal Council will have the responsibility of compiling and collating centre, state, and local government fiscal data and provide individual and consolidated fiscal accounts of the governments in India on a timely basis and make such data accessible to governments and public. Fiscal Council may serve as the much needed fiscal data warehouse providing access to such data for all potential users. It should maintain a website providing up to date fiscal data at monthly, quarterly and annual frequencies for the key aggregates of individual governments and their consolidated accounts.

Fiscal Data Analyst

8.26 Fiscal Council should utilize the rich fiscal data, both periodic and granular, for providing valuable insights into the underlying trends, drawing cautionary signals from these and highlighting their policy significance. As fiscal data analyst, the Fiscal Council should prepare status reports on key fiscal subjects. It should also provide ready-to-use fiscal data for the FCs as soon as these are set up and provide suitably long-term perspectives on the required series by the FCs. The Fiscal Council should advise apex and secondary institutions dealing with upkeep of fiscal statistics to improve the quality of fiscal data.

Assessing Public Sector Borrowing Requirement

8.27 The Fiscal Council should make an annual assessment of the PSBR covering the central and state governments and the public sector, taking into account the demand for and supply of savings.

Fiscal Consolidation Path Monitor

8.28 The central as well as state governments follow their respective fiscal consolidation paths according to their FRBMs and/or according the targets set by the FCs. The Fiscal Council should monitor the progress of these paths and come out with quaterly and annual accounts of these. It should highlight deviations from time to time and provide fiscal sustainability analysis in each case.

Fiscal Aggregate Forecaster

8.29 The Fiscal Council should set a framework for forecasting major fiscal aggregates in a macro-econometric framework to provide quarterly and annual forecasts to serve as inputs to public and private stakeholders.

Fiscal Policy Advisor

8.30 Fiscal Council should provide guidance to the central and state governments on appropriate fiscal policy interventions aimed at improving growth and macro-stabilization outcomes.

Co-ordinator of Macro-Stabilization Policies

- 8.31 In the traditional public finance theory, macro-stabilization is considered primarily as the responsibility of the central government. However, in India, some of the state governments are quite large. Centre's macro-stabilizing fiscal interventions, if co-ordinated with the state governments, at least with the major states, in terms of the extent and timing of intervention, can make centre's macro-stabilization efforts far more effective.
- 8.32 Macro-stabilization also requires co-ordination with the Reserve Bank of India. The central bank's polcies are now being guided by the Monetray Policy Committee under its own mandate. The Fiscal Council can faciliate further co-ordination incorporating in its advice the interactions between fiscal; and monetary policies through its macro-econometric model or based on expert advice.

Summary

- 8.33 In India's fiscal data system, there is a major institutional gap. This gap has been recognized and identified by a number of previous reviews on the subject including some of the recent FCs and the FRBM Review Committee that was recently set up by the central government. International experience also points to the importance of such an institution. In order to overcome this gap, in many countries, a 'Fiscal Council' has been set up. The FSC also suggests that the vast universe of fiscal data available in India at granular and governmental levels will remain underutilized unless a suitable platform is set up to make this data available and sharable to all potential users. In particular, the key role that Fiscal Council can play may be summarized as follows:
 - (a) Fiscal Data Coordinator
 - (b) Fiscal Data Analyst
 - (c) Assessor of Public Sector Borrowing Requirement
 - (d) Fiscal Consolidation Path Monitor
 - (e) Fiscal Aggregate Forecaster
 - (f) Fiscal Policy Advisor
 - (g) Coordinator of Macro-stabilization Polices
- 8.34 International experience suggests that countries who have setup Fiscal Councils in addition to fiscal rules have been successful in constraining overoptimistic fiscal forecasts by the governments.

9. Summary and Recommendations

9.1 We have undertaken an extensive review of the role, availability and issues with respect to fiscal statistics in India in the context of the changing ground conditions in the economy. Our findings are summarized below.

Fiscal Data System in India: Key Issues

- 9.2 Fiscal data relate to accounts of the government. A typical government account is divided into two sides namely receipts and expenditures. The balance of these is captured by accounts of deficit. Since India has a three-tier system of governance, there are more than 2.67 lakh governments. Apart from individual government accounts, their consolidated accounts at different levels of aggregations are also needed. Further, reliable data on intergovernmental flow of resources and expenditures are also required. Much of this data is not readily available.
- 9.3 There has been some important changes in the ground conditions in India affecting the management of fiscal data. In particular, we may take note of the abolition of plan non-plan distinction, the implementation of GST, and the extensive spread of digital platforms to capture data including fiscal data.

The fiscal data system in India suffers from various deficiencies. Some of these may be listed as:

- 1. Non-availability of critical fiscal data such as the data on pay and allowances
- 2. Divergence/ Discrepancy in data from alternative sources
- 3. Absence of distinction between actual fiscal data vis-à-vis. Estimates
- 4. Classification issues particularly on the expenditure side
- 5. Lack of transparency and reliability of fiscal data due to cash based accounting
- 6. Large amounts of tax revenues caught up in legal disputes
- 7. Transactions through different Funds
- 8. Issues with the accounts of autonomous bodies
- 9. Absence of accurate aggregation of fiscal data at different levels of the government
- 10. Lack of continuous long term series of fiscal data
- 11. Time lag issues
- 12. Issues in deficit measurement
- 13. Non-standard templates at different levels of the government
- 14. Lack of comprehensive and timely data for local bodies
- 9.4 Fiscal data should be considered as a public good. It has the characteristics of being both a consumption good and investment good. It provides information that can directly be of value or utility in understanding the working of the governments and their departments. It can also serve as inputs to policymakers, economists and researchers whose work may improve the efficiency of policymaking. It can also facilitate purchase and supply decisions of private firms and investment and credit decisions of banks and financial institutions as well as exporters and importers. Thus, it can uplift the efficiency of the overall economy and lead to welfare improving outcomes. For playing this role, fiscal data should be made freely available for common use.
- 9.5 India's fiscal data system should be developed in the framework of 'information' federalism wherein cooperation, coordination and competition among the different tiers of federal governance would build up a modern state-of-the-art fiscal data system. This would require considerable investment of resources.

Sources of Fiscal Statistics: Aggregation and Coordination

- 9.6 The universe of fiscal data sources may be considered as mainly consisting of primary, secondary and apex levels. At the primary level, all buyers and sellers, registered taxpayers and assessees are involved. At the secondary level, various government ministries and departments and specialized institutions and platforms such as the RBI, CGA, CAG, CSO, GSTN and PFMS are involved. At the apex level, it is the central, state and local governments who are the owners of their fiscal data. They also have the right and duty to publish and share these data with different stakeholders treating these as a public good.
- 9.7 In processing fiscal data such that they become sharable and presentable at different stages, some key steps are involved. These may be referred to as (a) Anonymization, (b) Compilation, (c) Aggregation and (d) Verification.
- 9.8 Institutions that play a key role at the apex level are the central and state governments. The local bodies have the responsibility and right to publish and share their data but so far, their fiscal data management has remained considerably deficient in India. At the secondary level, the important institutions are the CAG, CGA and the RBI. Newly created digital platforms such as the GSTN and the PFMS will play an increasing role in the compilation, sharing and utilization of fiscal data in future. A key institution which has a constitutional place and recognition is the FC of India which is usually constituted every five years. The FC is both a key user and provider of inter-state fiscal data on a comparable basis. However, lack of continuity in the series provided by the FCs underline the underutilization of the fiscal data that can potentially result from a follow-up of the FC work on a continuous basis. This effort would also facilitate the working of the succeeding FCs.

Centre's Fiscal Statistics: Playing a Pivotal Role

- 9.9 The MoF of the Union government of India maintains fiscal statistics of the central government. It is the pivotal ministry which has the responsibility of maintaining central government's fiscal data by coordinating data flows across all central ministries and departments. Correspondingly, the CGA keeps the accounts of the central government tax and non-tax receipts and expenditures. These accounts are audited by the CAG. A number of Parliamentary Committees such as the Estimates Committee, the Public Accounts Committee and the Committee on Public Undertaking provide foresight to maintaining centre's fiscal statistics. The RBI serves as an alternative source of Centre's fiscal data.
- 9.10 In recent years, a large number of intra-departmental digital initiatives have been undertaken to facilitate tax intelligence work. Two new digital facilities namely GSTN and PFMS have opened up extensive platforms for keeping micro level and aggregated fiscal statistics.
- 9.11 Some of the continuing problems in the maintenance of Centre's data system relate to the following:
 - 1. Non-availability/ discontinuity in access to Centre's fiscal data
 - 2. Non-reconciliation of several inconsistencies pointed out by the CAG
 - 3. Incompleteness of Centre's estimates of revenue forgone/ tax expenditures
 - 4. Consolidation of multiple data warehouses
 - 5. Issues with data relating to fiscal deficit targets

9.12 In spite of these difficulties, considerable innovations in fiscal data upkeep have been undertaken by the central government and the central government can play a leading role in maintaining India's fiscal statistics system at internationally comparable levels. There is a strong need for a missing apex institution such as the Fiscal Council that can bring about a greater consistency, quality, transparency and efficiency in relation to maintenance and utilization of fiscal statistics.

States' Fiscal Statistics: Facilitating Public Provision of Services

- 9.13 Some important classification and other changes have had a significant bearing on state level fiscal data. The abolition of the plan non-plan distinction has resulted in a simplification of the overly classified government expenditure data in India including state level fiscal data. With the abolition of this distinction, some of the inefficiencies resulting from the misplaced belief that plan expenditure is somehow more important than non-plan expenditure are expected to be removed. Similarly, after the recommendations of the HLEC on Efficiency in Public Expenditure Management, some of the central transfers to states which used to bypass the state budgets and treasuries are now being routed through them.
- 9.14 For the formulation of macro-fiscal policy, state fiscal data are of critical importance. Various Committees and Commissions including the FCs have examined the maintenance of the state fiscal data system from time to time and have pointed to a number of deficiencies.
- 9.15 Audit reports of state finances have shown that there are a number of problems in the accounting and reporting of fiscal data by states which is often in violation of the accounting rules set by the respective states and the CAG.

Some of the main deficiencies of state fiscal data may be listed as follows:

- e. Existing classification in major and minor heads has limited functional utility due to multiple amendments over time.
- f. Lack of uniformity in classification of different schemes under different major heads
- g. Reporting of Finance Accounts data only till the minor head is fairly problematic
- h. Limited standardization in object heads

Local Level Fiscal Statistics: Augmenting Decentralized Governance

- 9.16 The CAG highlighted in its submission to the FC 14 that most states have rules and regulations regarding formats of accounts for both rural and urban local bodies. However, a number of states were not complying with the scheduled timelines set for completion of accounts. In the absence of a sound monitoring mechanism for the preparation and finalization of accounts, accounts of local bodies continue to reflect large arrears. CAG observed that in PRIAsoft (accounting software used by most states for compilation of panchayat accounts), 38 per cent of the registered gram panchayats had not closed their annual accounts for 2012-13 as of February 2014. Similarly, it was noted that 43 per cent and 36 per cent gram panchayats had not closed their accounts for 2010-11 and 2011-12, respectively, as of February 2014.
- 9.17 SFCs have compiled local level data pertaining to their states but these compilations show considerable irregularity in terms of timeliness and non-uniformity in the application of concepts and definitions relevant for compiling fiscal statistics. Most SFCs highlight non-

availability of suitable disaggregated local level fiscal data as a major handicap for examining the state of fiscal health of the local bodies in their respective states.

9.18 CAG is providing technical guidance and support to primary auditors on local finances in the states. In the submissions to the FC 14, CAG had noted that audit reports were being submitted to the government or legislature in 21 states, with the first audit report under preparation for the remaining five states at that time. In the period from 2011-12 to 2012-13, 17 states had given the mandate of technical guidance and support to CAG. With the help and guidance of the CAG there has been some improvement in the audit of local bodies by the primary auditors, but there is still a vast scope for further improvement.

Granular Fiscal Data: Realizing Potential

- 9.19 A vast amount of fiscal data at the primary and micro levels including third party data may all be referred to as 'granular fiscal data'. Until recently, this rich source of information remained unutilized/ underutilized for want of suitable access points where such data may become available without any privacy issues. New digital platforms such as the PFMS and the GSTN have the potential to provide granular fiscal data in rich detail. The sharability of such data with the larger body of users depends on anonymization, compilation and aggregation of such data. It also requires suitable government policy to make this data accessible for general public use. This should become available to all key participants in the working of the economy including individuals, firms, banks and other financial institutions, researchers and national and international governments.
- 9.20 Big Fiscal Data are currently being utilized for tax intelligence activities. However, in addition to augmenting tax compliance by using Big Data, there is considerable potential also to utilize these for making the provision of publically provided goods and services far more efficient. To some extent, the central government's DBT is an initiative in this direction. However, a fuller exploitation of the rich information content of granular fiscal data would only become feasible if considerable amount of resources are invested for this purpose.
- 9.21 Many private enterprises have invested heavily in exploiting Big Data in order to enhance their reach and profitability. Central and state governments would do well to invest substantial resources in generating, processing and analysing Big Data not only for policy formulation but also for providing vital services such as health and education as well as for economic activities such as agriculture and maintenance of infrastructure.

High Frequency Data: Gathering Momentum

9.22 Fiscal data at a monthly frequency are available from a number of sources such as the DEA, MoF, CGA, CAG, the RBI and the PPAC. These data can also be aggregated to give fiscal data at a quarterly frequency. Both these sets can be utilized for monthly and quarterly modelling of the fiscal aggregates. Such modelling is best done in a macro-econometric framework. In fact, a number of high frequency series indicating broad segments of the macro economy such as production/ output, prices, exchange and interest rates, external trade and monetary aggregates are already available. Utilizing these rich datasets, it is possible to develop analytical frameworks for understanding patterns of seasonality as well as for forecasting so as to anticipate unfolding economic trends and patterns with a view to designing appropriate and timely policy interventions.

9.23 One issue in utilizing high frequency data is heterogeneity in their release timings. Further, there is also an issue in relation to their aggregation so as to obtain corresponding annual magnitudes. There are issues of consistency between aggregated monthly or quarterly data and the corresponding annual estimates obtained independently.

Recommendations

- 9.24 There is need for preparing consolidated accounts of the public sector, the central government, the state governments and the local governments. Such consolidation is required at different levels. This exercise should be undertaken at the central or an apex level and a suitable institutional mechanism requires to be set up for this purpose. The concept of a Fiscal Council has been discussed subsequently in this Report. The Fiscal Council can also be entrusted with the task of preparing these consolidated statements in coordination with the CAG, the CGA, the central and state governments and the RBI.
- 9.25 An Expert Committee may be set up to review estimation of tax expenditures by the central government. This Committee should provide a comprehensive methodological framework, examine central government estimates of revenue forgone in relation to coverage, normative benchmark and need for reforms of the underlying deductions, concessions and exemptions. It should provide a methodological framework which state governments may also consider in preparing their own tax expenditure estimates.
- 9.26 For estimating the volume of implicit subsidies and monitoring progress in reforming these subsidies, the following steps may be taken:
 - a. Estimation of implicit subsidies should become an annual exercise. This exercise may be outsourced by the MoF to specialised institutions.
 - b. The MoF may take a view on proposed reforms for rationalizing and reducing the implicit subsidies each year and make it explicit in the budget or otherwise.
 - c. In subsequent years, the impact of initiatives taken up during the course of a fiscal year for reforming the implicit subsidies should be assessed and published.

Similar steps should be implemented by the state governments.

- 9.27 The methodology for preparing estimates and forward projections should be provided for in all the budgetary estimates wherever such projections are used. This is particularly important for the medium-term fiscal strategy and policy statements annexed to the central budget.
- 9.28 Annual assessment of the quality of projections should be undertaken and lessons should be drawn for improving the quality of projections.
- 9.29 GST data including IGST drawn from GSTN and central and state governments as also the RBI should be shared amongst all stakeholders and public at large. For this purpose, a format should be developed after taking into account the findings and suggestions of the GST Subcommittee set up by the CSO for this purpose.
- 9.30 There should be a centralized website for publishing all central government data. This should collate and coordinate with departmental websites and databases within the Ministry of Finance. It should also capture relevant granular and high frequency data.
- 9.31 It is desirable that on a periodic basis, the Ministry of Finance publishes all relevant changes in tax rates and related provisions communicated through individual notifications so

that the stakeholders may have an authentic information on all applicable tax rates and provisions regarding exemptions and deductions etc. that are effective on the date when such compilation is published. It may be considered desirable to publish this information on a quarterly basis.

- 9.32 The central government should undertake, on a periodic basis, an assessment of public sector borrowing requirement covering the overall public sector as also the central and state governments. An assessment of available demand and supply of savings should also be made at this time. The relevant information should be put on the central fiscal data website so that other stakeholders can assess the situation regarding availability and cost of borrowed funds.
- 9.33 There is a need to develop a reliable and transparent database with regard to government's assets and liabilities. In this context, the following initiatives may be undertaken.
 - a. An exhaustive survey, enumeration and compilation of ownership records of these resources should be undertaken.
 - b. A modern office to serve the role of an estate manager should be set up.
 - c. A suitable policy is required to ensure inter-generational equity in the exploitation of this ownership of the government, for not only of the present generation but for all future generations.
 - d. A consolidated record of all public sector liabilities including government liabilities with respect to loans undertaken or with respect to loans guaranteed should be readily available.
 - e. In the case of contingent liabilities, there is a need to re-assess the associated risks from year to year which may require actuarial expertise and a mechanism for developing a consolidated statement of actual and contingent liabilities along with an up-to date assessment of the associated risks. This needs to be done for not only the government but also the associated departmental and public sector enterprises.
- 9.34 There is a significant time lag in the preparation of the economic and functional classification of central government's budgetary data. There is a need to examine the current economic and functional classification of centre's budgetary data so that it can be re-classified to facilitate greater analytical utility. An expert committee may be periodically constituted to examine the format of the economic classification of the central budget and suggest modifications.
- 9.35 An assessment should be made and published on an annual basis of the amount of tax revenues caught up in legal disputes. An assessment should also be made of the cost of all legal cases which the central government may be involved in, in the context of its regulatory functions as also in relation to its ownership of assets and liabilities.
- 9.36 In the context of outlay-outcome budgeting, the following steps may be taken.
- a. The outlay-outcome linkage framework should be extended to cover all government schemes and programs.
- b. The state governments should also incorporate an outlay outcome framework for their schemes and programs.
- c. Since the outcomes necessarily relate to a medium-term perspective, an evaluation exercise regarding achievement of outlays with respect to outcomes should be taken up.

- 9.37 For the states, the current system of classification should be replaced by a multidimensional system of classification consisting of seven segments namely, Administrative, Function-wise, Program cum scheme, Recipient, Target, Economic and Geographical segments.
- 9.38 Each state government should publish on an annual basis, a consolidated statements separately for the rural and urban local bodies of the state ensuring uniformity in classification and presentation by individual local governments as consistent with CAG's technical guidance.
 9.39 There is a clear institutional gap in the procurement, collation, coordination and publication of fiscal data. This gap can be filled up by constituting a Fiscal Council with backed by appropriate expertise and technical and secretariat assistance.

Constituting a Fiscal Council

- 9.40 There is considerable under-utilized information in India that is available both at micro and aggregate levels relating to flows and stocks. For further utilization of this potential, we require a highly specialized institution entrusted with the responsibility of collecting and analysing fiscal statistics. Such an institution has to be a government institution in order to ensure that such an institution has adequate powers to access data from the available sources including the central government, all state governments and Union Territories who may be entrusted with the task of compiling data from their respective government departments and various other sources such as the GSTN and PFMS.
- 9.41 Such an institutional gap been recognized and identified by a number of previous reviews of the subject including some of the recent FCs and the FRBM Review Committee set up by the central government. The Committee (2017) has recommended the setting up of a Fiscal Council. Although the Centre's FRBM was modified, partially incorporating the recommendations of the FRBM Review Committee, the recommendation in regard to the constitution of Fiscal Council has not been implemented so far by the central government. International experience also points to the importance of such an institution. In order to overcome this gap, in many countries, a 'Fiscal Council' has been set up.
- 9.42 The NSC had earlier recommended that it is the Office of the Chief Economic Advisor in the Ministry of Finance (MoF) who may be entrusted with this responsibility. However, the Office of the Chief Economic Advisor has been preoccupied with providing day to day inputs to the MoF and with the preparation of the Economic Survey at annual and semi-annual intervals and so on. As a result, it has not been able to serve as a repository of fiscal data where such data could be accessed by both public and private institutions, researchers and scholars. But in the absence of such an institution, it is also clear that formulation of fiscal policy and the potential role that the fiscal policy can play in the overall macroeconomic policy has remained deficient.
- 9.43 The FRBM Review Committee had proposed the setting up of a 3-member Fiscal Council which may play the role of an apex fiscal statistics institution for the country. We consider a 3-member Fiscal Council including the Chairman as appropriate. The Council should have an adequate secretariat.
- 9.44 The Fiscal Council may serve the following roles:
 - (a) **Fiscal Data Coordination:** As fiscal data coordinator, the Fiscal Council should serve as the main data warehouse for country's fiscal statistics emanating from Centre, state

and local levels. It should maintain a website providing up to date fiscal data at monthly, quarterly and annual frequencies for the key aggregates of individual governments and their consolidated accounts.

- (b) Analysis of Fiscal Data: As fiscal data analyst, the Fiscal Council should prepare status reports on key subjects including the achievements under respective FRBMs of the central and state governments; it should also provide ready-to-use fiscal data for the FCs as soon as these are set up and provide suitably long-term perspectives on the required series by the FCs; advise apex and secondary institutions dealing with upkeep of fiscal statistics to improve the quality of fiscal data.
- (c) Assessing Public Sector Borrowing Requirement: The Fiscal Council should make an annual assessment of the PSBR covering the central and state governments and the public sector, taking into account the demand for and supply of savings.
- (d) Monitoring Fiscal Consolidation Path: The Fiscal Council should monitor the adherence by the central and state governments of the stipulated fiscal consolidation paths according to the FC/ their respective FRBMs and highlight deviations from time to time and provide fiscal sustainability analysis.
- **(e) Forecasting of Fiscal Aggregates:** As Fiscal Aggregate Forecaster, it should prepare multi-year forecasts for important fiscal aggregates in a macro-economic framework.
- **(f) Advising on Macro-Fiscal Policy:** The Fiscal Council should act as a fiscal policy advisor to the central and the state governments for stimulating growth and for formulating macro-stabilizing fiscal interventions.
- **(g) Co-ordinator of Macro-Stabilization Policies:** The Fiscal Council may coordinate between the central and some of the large state governments in the fiscal interventions aimed at macro-stabilization. Further, the Fiscal Council may also review and advice on the efficacy of fiscal and monetary policies aimed at macro-stabilization.
- 9.45 The Fiscal Council may be anchored by MoF, GoI in the context of its financing and administrative arrangements but in its working, it should be given full autonomy. It should be provided with adequate resources so as to be supported by qualified economists and data scientists and adequate IT infrastructure.
- 9.46 Compilation and analysis of fiscal statistics within the government is also underfinanced. The allocation of resources for fiscal statistics needs to be significantly enhanced. Considering the importance of the emerging area of information federalism, the NSC may suggest suitable enhancement in the allocation of resources by the governments at all levels for fiscal statistics. Further, the NSC may share this Report with FC 15 which is currently working on its ToR. The FC 15 may be requested to earmark a certain benchmark share of resources defined as percentage of revenue receipts at each level of government which should be devoted to fiscal statistics.

Annex 1: List of Central Ministries/ Departments

Sl.	Times 10 East of Contract Williams (108), 2 open times (108)						
No	Central Ministry/Department						
1	Ministry of Agriculture and Farmers' Welfare						
	1) Department of Agriculture, Cooperation and Farmers' Welfare						
	2) Department of Agricultural Research and Education						
	3) Department of Animal Husbandry, Dairying and Fisheries						
2	Department of Atomic Energy						
3	Ministry of Ayurveda, Yoga and Naturopathy, Unani, Siddha and Homoeopathy (Ayush)						
4	Ministry of Chemicals and Fertilisers						
	1) Department of Chemicals and Petrochemicals						
	2) Department of Fertilisers						
	3) Department of Pharmaceuticals						
5	Ministry of Civil Aviation						
6	Ministry of Coal						
7	Ministry of Commerce and Industry						
	1) Department of Commerce						
	2) Department of Industrial Policy and Promotion						
8	Ministry of Communications						
	1) Department of Posts						
	2) Department of Telecommunications						
9	Ministry of Consumer Affairs, Food and Public Distribution						
	1) Department of Consumer Affairs						
	2) Department of Food and Public Distribution						
10	Ministry of Corporate Affairs						
11	Ministry of Culture						
12	Ministry of Defence						
13	Ministry of Development of North Eastern Region						
14	Ministry of Drinking Water and Sanitation						
15	Ministry of Earth Sciences						
16	Ministry of Electronics and Information Technology						
17	Ministry of Environment, Forests and Climate Change						
18	Ministry of External Affairs						
19	Ministry of Finance						
	1) Department of Economic Affairs						
	2) Department of Expenditure						
	3) Department of Financial Services						
	4) Department of Investment and Public Asset Management (DIPAM)						
	5) Department of Revenue						
20	Ministry of Food Processing Industries						
21	Ministry of Health and Family Welfare						
	1) Department of Health and Family Welfare						
	2) Department of Health Research						
22	Ministry of Heavy Industries and Public Enterprises						
	1) Department of Heavy Industry						

Sl.	Central Ministry/Department					
No	* *					
22	2) Department of Public Enterprises					
23	Ministry of Home Affairs					
24	Ministry of Housing and Urban Affairs					
25	Ministry of Human Resource Development					
	1) Department of School Education and Literacy					
• •	2) Department of Higher Education					
26	Ministry of Information and Broadcasting					
27	Ministry of Labour and Employment					
28	Ministry of Law and Justice					
29	Ministry of Micro, Small and Medium Enterprises					
30	Ministry of Mines					
31	Ministry of Minority Affairs					
32	Ministry of New and Renewable Energy					
33	Ministry of Panchayati Raj					
34	Ministry of Parliamentary Affairs					
35	Ministry of Personnel, Public Grievances and Pensions					
	1) Ministry of Personnel, Public Grievances and Pensions					
26	2) Central Vigilance Commission					
36	Ministry of Petroleum and Natural Gas					
37	Ministry of Planning					
38	Ministry of Power					
39	Ministry of Railways					
40	Ministry of Road Transport and Highways					
41	Ministry of Rural Development					
	1) Department of Rural Development					
42	2) Department of Land Resources					
42	Ministry of Science and Technology					
	1) Department of Science and Technology					
	2) Department of Biotechnology					
42	3) Department of Scientific and Industrial Research					
43	Ministry of Shipping					
44	Ministry of Skill Development and Entrepreneurship					
45	Ministry of Social Justice and Empowerment 1) Department of Social Justice and Empowerment					
	 Department of Social Justice and Empowerment Department of Empowerment of Persons with Disabilities 					
46						
47	Department of Space Ministry of Statistics and Programme Implementation					
48	Ministry of Steel					
49	Ministry of Steel Ministry of Textiles					
50	Ministry of Tourism					
51	Ministry of Tribal Affairs					
52						
53	Ministry of Water Resources, River Development and Ganga Rejuvenation Ministry of Women and Child Development					
	Ministry of Women and Child Development Ministry of Youth Affairs and Sports					
54	Ministry of Youth Affairs and Sports					

Annex 2: MoM of Second Meeting of Fiscal Statistics Committee

List of attendees of the second meeting held at NIPFP, New Delhi on 7 July 2017:

- 1. Dr. D.K. Srivastava, Chief Policy Advisor, EY India and Former Director, Madras School of Economics (Chairman)
- 2. Dr. Rathin Roy, Director, NIPFP (Member)
- 3. Dr. Pulin B. Nayak, Professor, Delhi School of Economics (Member)
- 4. Mr. Indranil Bhattacharya, Director/ DGM, RBI (Member)
- 5. Mr. S. Ramaswamy, Principal Chief General Manager, Department of Government and Bank Account, RBI (Member)
- 6. Ms. Kanchana V. Ghosh, Director, National Accountings Division, Central Statistics Office, MOSPI (representing member of the Committee, Ms. Rajeshwari from Central Statistics Office, MOSPI)
- 7. Dr. Pinaki Chakraborty, Professor, NIPFP (Member-Secretary)

By Invitation

- 8. Dr. Muralikrishna Bharadwaj, Senior Manager, Macro-fiscal Unit, Policy Group, EY India
- 9. Mr. Tarrung Kapur, Senior Consultant, Macro-fiscal Unit, Policy Group, EY India
- 10. Ms. Ragini Trehan, Consultant, Macro-fiscal Unit, Policy Group, EY India
- 11. Ms. Sritama Ray, Summer Intern, NIPFP
- 12. Anchal Jain, Manager, RBI
- 13. Ms. Neha Kalra, Deputy Director, National Accountings Division, Central Statistics Office, MOSPI

Minutes of Meeting:

- 1. Dr. DK Srivastava (hereinafter referred to as Chairman) welcomed the members to the second meeting of the Committee on Fiscal Statistics. The Chairman initiated the discussion by briefing the Committee members on the deliberations of the first meeting and follow-up. He highlighted that one of the central points of last meeting's discussion was to examine, in the context of the first ToR of the Committee, the recommendation by Dr. Rangarajan Commission (2001), of establishing a data repository for fiscal statistics at the national level and to assess the progress made towards this. In this context, he referred to one of the recommendations of the FRBM Review Committee, whose report was recently made public. This recommendation pertains to the establishment of a Fiscal Council which, as discussed in the first meeting, could serve as a repository of fiscal statistics and would primarily undertake the task of collection, compilation and initial analysis of fiscal statistics. All Committee members who were present in the first meeting of the Committee were in favour of such an institution coming into existence. The Chairman further indicated that although the recommendations of the FRBM Committee has been undergoing a lot of debate but the idea of a fiscal council is being considered as a relevant one. The MoF may take a final decision in this regard during the course of the year.
- 2. In the context of the remaining three ToRs of the Committee, the Chairman briefly made observations on the two kinds of fiscal data which are available. The first set relates to the fiscal data which are already available in the system with a regular frequency such as the monthly accounts of the central government released by the CGA. Similar data for states on a monthly basis is also released by the CAG, although with a considerable lag and other

deficiencies such as non-uniformity of the reporting templates across states and so on. However, these monthly data could be compiled on a quarterly and annual basis and then reconciled with annual data published for the Centre and the states. The second set of data, to which the third ToR of the Committee has also made reference, is the granular data having macro-fiscal implications. This includes data generated in newly established ITenabled institutions such as the PFMS and the GSTN. The PFMS captures data relating to intergovernmental fiscal transfers, both in terms of payments and receipts, payment of states' and local bodies' shares in central taxes, flow of grants of different kinds from any of the public accounts and their utilization by the recipients. The GSTN captures transaction level data having macro-fiscal implications. The information about all transactions happening in the production process which eventually lead to consumption could signal the growth in the economy. However, sharing of this data is a critical issue. GSTN is an autonomous body, but 49% of its ownership is with the central and state governments while 51% is with the private sector. If the GSTN is willing to share this data, it can be anonymized. After some stage of processing, data can be delinked from the concerned entities. This exercise can prove to be very useful. A body like Fiscal Council could easily have access to such data.

- 3. Another issue highlighted by the Chairman pertained to the status of fiscal data at the local level. He indicated that FCs have discussed this issue from time to time and allocated funds to collect and compile data at the local level but progress has been limited so far. Aggregated data for local bodies at the state level is not being compiled as per available information.
- 4. The Chairman indicated that the members of the Committee present in the first meeting considered it better to first focus on the regularly available data (first set of data indicated in para 2) and examine the issues of aggregation, compilation and in the context of states, comparability of this data across states. He further indicated that it is critical to understand how the fiscal data for states is used along with the corresponding fiscal data for the Centre to obtain a comprehensive view of the fiscal trends of the general (combined) government. In other words, a comprehensive view of the combined account of central and state governments is critical. In this context, members of the Committee from the RBI were requested in the first meeting, to provide clarity on the methodology adopted by the RBI in compiling the combined accounts, through a presentation in the second meeting.
- 5. Before the scheduled presentation by the RBI members, Dr. Rathin Roy drew attention towards some important issues. The first issue pertained to the divergence/discrepancy in the same data for general government across different sources (NAS, MOSPI (using fiscal data for states as compiled by CAG and the fiscal data for the Centre as compiled by the CGA), the RBI's collation of states fiscal data that they receive from each state and the data for centre, IPFS, income tax data from All India Income Tax Statistics, although they have stopped publishing this data since 2000-01). This further led to the second observation by him that it is critical to pressurize the government to revive the publication of the income tax statistics on a regular basis and going forward, also bring out a regular publication on data captured by the GSTN. The third issue related to the non-availability of administrative data on expenditure that is, the data on pay and allowances/ spending on payroll. In his opinion, the amount that is reported by the Centre, under the head pay and allowances, is a gross underestimate. He explained that even the data used in the Pay Commission's calculations was an estimate gathered from alternate sources. The fourth issue related to the lack of clarity on intragovernmental transactions such as intragovernmental borrowings.

- 6. Apart from these four issues Dr. Rathin Roy also initiated discussion relating to the proportion of existing fiscal data that is actual and proportion that pertain to 'estimates'. In this context, he indicated that fiscal data used by the FCs are forward estimates. Further, most data provided by the CSO regarding the National Accounts are forward estimates. He explained the issue with the example of GDP data. He indicated that all GDP data are estimates i.e., the process of reconciliation keeps continuing, thereby requiring multiple revisions to past years' GDP numbers. That is why several revised estimates for GDP are published time and again. His suggestion was to make a clear distinction between actuals and estimates and clarify this in the minds of the public.
- 7. Dr. Pulin enquired if the historical GDP data are estimates or actuals. According to him, the GDP numbers get finalized after undergoing 2 or 3 revisions and further revisions could only be due to changes in the base year, if any. To this, Dr. Rathin Roy clarified that in order to arrive at the finalized GDP numbers, the decision to stop further revisions to these numbers is purely administrative and therefore GDP numbers for the past years also continue to be estimates. The Chairman added to this discussion by explaining to the Committee members, that the final estimates for GDP numbers exist, but they still remain estimates. At this juncture, Ms. Kanchan indicated that the process is similar in some other countries also and this is due to the presence of unorganized sector where firm data doesn't exist. In this situation, there could, at best, be final estimates and not actuals for GDP. Dr. Rathin Roy informed the Committee that apart from the GDP data, other fiscal data such as the payroll data are estimates. The Chairman concluded the discussion by remarking that the points made by Dr. Rathin Roy are critical and that there needs to be a clear distinction between actuals and estimates.
- 8. This discussion was followed by the scheduled presentation by the RBI members entitled "General Government Finances". The presentation dealt with the compilation of combined government statistics by the RBI. Mr. Indranil Bhattacharya and his colleague, Anchal Jain explained that as part of the compilation process, the budgetary data for the Central government is taken at the initial step. However, this is later replaced by the Annual Financial Statement as soon as the finance accounts of the centre are obtained. Data for the states are sourced exclusively from respective state budgets. The RBI receives hard copies of these Budget documents and collation and compilation is carried out in their central office and then the combined fiscal position of the government is published. They also explained their data publishing calendar according to which provisional data are published in August (Annual Report) and September (RBI Bulletin) and revised data are published in RBI Bulletin at the time of the publication of the Report 'State Finance: A Study of Budgets'. Revised data are generally published between January and March.
- 9. Several issues were raised and deliberated upon by the Committee members on the presentation that was made by the members from RBI. During the discussion on the topic "General Government Receipts", Dr. Pinaki enquired whether the states' share in central taxes, which is netted out from the combined tax receipts, was sourced from the states' budgets or the Centre's budget. The RBI team clarified that the source for this data is the central budget. However, Dr. Pinaki indicated that the central transfers received by the states, as given in the states budgets is not exactly equal to the transfers made by the Centre, as given in the central budget and the extent of this discrepancy is quite high. Mr. Indranil explained that the states themselves prefer this data to be sourced from the Centre's accounts. There are operational problems such as the different timing for closing of the accounts for Centre and states and when the states actually receive the transfer amount. Dr.

Pulin remarked that there should be a convergence in this data point across the two sources over a period of time, if not in any particular year.

- 10. Mr. Indranil further explained that the RBI books of accounts are kept open for approximately 21 days after the closure of government accounts on 31 March so that the transactions which get realized in the next fiscal year are included in the current fiscal year and are not carried forward to the next fiscal year. Mr. Indranil also indicated that there are three different accounting years, namely, fiscal year, calendar year and RBI's accounting year, which adds to the confusion. Mr. Ramaswamy added to it by indicating that the possible changeover from fiscal year to calendar year might have an implication for this.
- 11. The Chairman clarified that the amount given by the Centre as transfers is not shown as the same as that received by the states in the respective accounts. Mr Pinaki also indicated that the amount received by the states has never been equal to the share of transfers as prescribed by the FCs. Currently, the prescribed share by FC 14 stands at 42%, but the share received by all states together is around 37%. The Chairman explained that this is because of the cesses, surcharges and the cost of collection which are netted out from Centre's gross taxes. There is no clarity in the policy regarding the specific cesses and surcharges which the GoI collects, which reduces the sharable pool and ultimately the transfers received by the states. He also pointed out that the cost of collection is determined by the CAG but the methodology for this is not disclosed and therefore this remains an unknown amount. Dr. Pinaki also noted that, although in the Union Budget, on the expenditure side, under fiscal services, there is an entry for cost of collection, but what is actually deducted from Centre's gross taxes is not known. It was concluded that this is an issue of transparency which needs to be highlighted by the Committee.
- 12. Another issue raised by the Chairman pertained to the need for classification of expenditure into developmental and non-developmental. He was of the opinion that India has already suffered from excessive expenditure classification and this kind of classification may not be necessary unless there is a rationale to it. He also indicated that as per the Constitution, expenditure is classified into revenue and non-revenue, that is, capital.
- 13. Taking this discussion further, Dr. Pulin asked that why the development revenue expenditure was net of plan grants to states when the plan non-plan classification has been discontinued. The RBI team explained that this classification is required for the netting out process in the calculation of general government's development and non-development revenue expenditure based on the existing methodology of the RBI. Since plan grants are no longer in the Central budget for 2017-18, the non-plan grants were deducted from total grants and the residual so obtained was considered as plan grants. Mr. Indranil explained that this was necessary because although the 2017-18 central budget had classified expenditure into only revenue and capital, the states continue to use the old classification of expenditure into plan and non-plan in their state budgets. He also pointed out that the RBI is just the recipient of such data and it should be the fiscal authorities who should take a call regarding this classification issue.
- 14. However, Dr Pinaki was of the opinion that this classification is an additional classification and the relevant revenue and capital expenditure could easily be derived even in the presence of such a classification. To this, the Chairman indicated that such a classification could be misleading and enquired regarding the beginning of this convention. Dr. Rathin Roy added to this point considering the definition of development expenditure as per the

- RBI. According to the RBI, "development expenditure is the expenditure on Social services, Economic services, non-Defence General services". He indicated that it is not appropriate to consider, say, for e.g., expense on administration in defence services as non-developmental and the expense on administration in non-defence general services as developmental. The Chairman agreed to Dr. Rathin Roy's argument and explained that there is a notion that development expenditure, as classified by an institution like RBI, indicates productive expenditure as opposed to non-development expenditure.
- 15. Dr. Pinaki further asked as to why total grants, instead of just plan grants, have not been netted out in the calculation of development revenue expenditure of the general government. The RBI team explained that the methodology adopted by the RBI, in some sense, equates plan to development and non-plan to non-development. Thus, plan grants are netted from development revenue expenditure and non-plan grants are netted from non-development revenue expenditure.
- 16. The Chairman summarized and put forward the Committee's question to the RBI's members: Given that the plan-non-plan classification is now discontinued, would the RBI consider re-examining the need for classification of expenditure into development and non-development.
- 17. Mr. Indranil also requested the Chairman to kindly consult Dr. C. Rangarajan, who served as the deputy Governor of the RBI from 1982 to 1991, after which he served as the Governor from 1992 to 1997, for clarification regarding the rationale behind the classification of expenditure into development and non-development. The Chairman agreed to speak to him and find out.
- 18. During the discussion of the topic "General Government Deficit Indiators", the Chairman asked the difference between gross fiscal deficit (GFD) and fiscal deficit (FD). Dr. Pulin enquired whether the RBI wanted to make a distinction between gross FD and net FD of the combined government. Dr. Pinaki clarified that the gross FD is not netted out for lending. Fiscal deficit implies that it is netted out for net lending, which is defined by the RBI as loans and advances from Centre to States minus recovery of loans and advances from States. He further explained that as per the RBI's definition, GFD is gross borrowing minus repayment while FD is gross borrowing minus repayment minus lending. The Chairman suggested that the use of word gross could be dropped and the definition of FD could be adjusted accordingly.
- 19. There was also a discussion about whether or not the revenues from disinvestment should be considered as a part of receipts in the calculation of FD. It was indicated that in the methodology used by the IMF to calculate FD, revenues from disinvestment are excluded from receipts. Dr. Pinaki and the Chairman were of the opinion that selling of assets would straightaway mean a reduction in existing liabilities, affecting servicing of debt and eventually a reduction in the borrowing requirement. While summarizing this issue, the Chairman indicated that terming fiscal deficit as GFD is a definitional issue which needs to be resolved.
- 20. Further, during the discussion of the topic "Combined Receipts and Disbursements of the Central and State Governments: Sources of Financing-Institution wise", Dr. Pinaki asked as to what is meant by non-bank credit to the government. Mr. Indranil explained that it is

- derived residually, that is, it is domestic financing to the government less net bank credit to the government.
- 21. During the discussion of "Key Deficit Indicators", Mr. Indranil indicated to the Committee members that the outstanding liabilities of the Centre, States and the General government are calculated at book value and also at the current exchange rate. Outstanding liabilities at current exchange rate are calculated, not by using the exchange rate as on date, but by taking annual average exchange rate.
- 22. While discussing the "*Trends in Key Fiscal Indicators*", the Chairman took note of the usage of the term "disbursement" rather than expenditure by the RBI. In this context, Dr. Pinaki indicated that there is difference between the two terms. The Chairman suggested to the RBI members to re-examine the continuation of this terminology. Mr. Indranil indicated that the Annual Financial Statement of the government also uses the term disbursement. However, Dr. Pinaki clarified that the disbursement numbers in the Annual Financial Statements are much higher than the expenditure numbers in the Budget documents.
- 23. Further, there was a request by Mr. Indranil for a presentation by some expert from IPFS for understanding the methodology used by them to calculate fiscal statistics for the general government. The Chairman indicated that Dr. Arvind Kumar, formerly from the MoF, could be contacted for this.
- 24. At this juncture, the Chairman indicated that there are significant issues regarding the methodology used for compilation of data for the Centre and states. Moreover, as discussed during the course of the meeting, there are significant conceptual issues also. There is also the bigger issue of not being able to capture and appropriately aggregate, granular data which is getting generated by the IT-enabled institutions.
- 25. The members of the Committee came up with some suggestions for resolving several issues pertaining to the collection and compilation of fiscal statistics, as discussed in the first and the second meetings. Mr. Indranil suggested that it should be a mandate for the states to report their budgetary data in a standard template, which could be the same as that used by the Centre. In response to Dr. Pulin's question regarding the discontinuation of All India Income Tax Statistics, the Chairman informed the Committee members that as per available information, a detailed dataset on PIT and CIT is available but is not being published.
- 26. Towards the end, Ms. Kanchan enquired if the Committee plans to make suggestions regarding the collection and compilation of data for local bodies and autonomous bodies. Referring to one of the recommendations of FC 13, she informed the Committee members about their initiative of preparing a simple schedule for collecting data on current and capital receipts and expenditure at the local level. She informed that they could gather local level fiscal data for almost 11 states, although with gaps and deficiencies. One of the main challenges faced by them is that there is no uniformity in reporting data at the local level. Secondly, there is still no availability of the soft version (electronic format) of consolidated demand for grants by the local and autonomous bodies. In response to these observations, the Chairman indicated that these are critical points and the Committee has, by no means, decided to exclude the issue of fiscal statistics at the local level. The Chairman summarized the points made by the MOSPI representatives in two parts. First, it needs to be decided as to how comprehensive the coverage should be, in terms of the fiscal data for local and autonomous bodies and second, there is a need to examine the issue of non-availability of

electronic version of the consolidated demand for grants. Mr. Indranil also informed the Committee members that the RBI had earlier attempted to conduct a study and compile data for municipal finances. But data at that level were not available.

Follow-Up Points

- 1. The Committee should start drafting final set of suggestions from September 2017 for further discussions and finalization.
- 2. Presentation on PFMS and GSTN in the upcoming meetings.
- 3. Invite Mr. Arvind Modi or his representative to one of the meetings of the Committee to discuss about the status of All India Income Tax Statistics.
- 4. The Chairman indicated that Dr. Arvind Kumar (formerly from the MoF) could be contacted for a presentation regarding the methodology used by IPFS for aggregating fiscal data for the general government.
- 5. A presentation by the MOSPI representatives detailing their current practice of collating local level fiscal data and the issues that they come across in the process in the next meeting.

Annex 3: MoM of First Meeting of Fiscal Statistics Committee

List of attendees of the first meeting held at NIPFP, New Delhi on 30 March 2017:

- 1. Dr. D.K. Srivastava, and Chief Policy Advisor, EY India and Former Director, Madras School of Economics (Chairman)
- 2. Dr. Rathin Roy, Director, NIPFP (Member)
- 3. Dr. Pinaki Chakraborty, Professor, NIPFP (Member)
- 4. Mr. Indranil Bhattacharya, DEPR, RBI (Member)
- 5. Mr. S. Ramaswamy, Principal Chief General Manager, Department of Government and Bank Account, RBI (Member)
 By Invitation
- 6. Dr. Murli Krishna Bhardwaj, Senior Manager, Macro-fiscal Unit, Policy Group, EY India
- 7. Ms. Ragini Trehan, Consultant, Macro-fiscal Unit, Policy Group, EY India

Minutes of Meeting:

- 1. Dr. DK Srivastava (hereinafter referred to as Chairman) welcomed the members to this first meeting of the Committee on Fiscal Statistics. He explained that although the meeting was scheduled earlier, it could not be held due to unavoidable reasons. He thanked Director, NIPFP for kindly agreeing to host the first meeting. It was noted that Dr. Pulin Nayak had indicated that he had a prior engagement and Dr. Errol D'Souza could not schedule an air travel because of the requirement of travelling only by Air India or the need to go through a lengthy process of prior approvals. The Committee was also informed that Dr. Arvind Subramanyam was abroad at that time. The nominee from the CSO was preoccupied with attending to some parliamentary queries.
- 2. Chairman initiated the discussion by highlighting the importance of capturing, compiling, organizing, publishing and analysing fiscal statistics for facilitating policy analysis, forecasting and determining responses to unanticipated economic changes in a timely and effective manner. In this context, he emphasized the need to take advantage of the available IT and digitization platforms that have opened up unprecedented opportunities for management of fiscal data. He then invited members to consider the ToR of the Committee.
- 3. The first issue of discussion pertained to the implementation of one of the recommendations of the NSC for setting up an institutional mechanism to serve as a repository of fiscal statistics. Dr. Rangarajan Commission, in 2001, had recommended the establishment of a data warehouse for fiscal statistics at the national level within the Department of Economic Affairs (DEA). Such an institutional mechanism is intended to collect, compile and store data generated and disseminated by various official agencies. This would enable building up a comprehensive database on Indian Fiscal Statistics covering data at both micro and macro levels. However, according to available information, no such initiative has been undertaken till date.
- 4. Dr. Rathin Roy explained that the problem is that government departments are essentially departments dealing with day to day operations and because of that they don't even have a medium term fiscal strategy. Moreover, there are no clients/ users of the fiscal data in the DEA or the office of the CEA. Another issue was that the DEA would not be able to get hold of the state-level fiscal data as they do not have the necessary institutional links with the state governments. In his opinion, Department of Expenditure might be a better option

for handling the state-level fiscal data but it would have a limitation in terms of the coverage of fiscal data. Another institutional option could be the 'Fiscal Council', the setting up of which has been recommended by the FRBM Review Committee. Dr Rathin Roy, who was a member of the Review Committee, indicated that one of the responsibilities of the Fiscal Council is collection and collation of fiscal data and the Fiscal Council would also be using this data for its own analysis.

- 5. Chairman suggested that we might wait for the recommendations of the Review Committee to be made public. In his view, the DEA may not have the necessary resources and bandwidth in order to serve as a data repository for fiscal statistics. He suggested that if the recommendations of the FRBM Committee are accepted, then one of the recommendations would lead to the formation of a Fiscal Council which if constituted as a permanent body, may be the appropriate entity to serve as the repository of fiscal data. This could be made a part of the ToR of Fiscal Council.
- 6. Examining the present system for dissemination of data (ToR 4), it was pointed out by the Chairman that the Revenue Department currently releases fewer tax statistics than it used to almost 15 years ago. Three important datasets whose publication have been discontinued are (1) All India Income Tax Statistics, (2) Central Board of Indirect Taxes and Customs Directorate of Data Management [CBIC (erstwhile CBEC) DDM] and (3) Combined Accounts of both Central and State governments by the CAG.
- 7. Dr. Rathin Roy suggested a memorandum of understanding (MoU) amongst the important generators of fiscal statistics such as DEA, Department of Expenditure, and Department of Disinvestment may be a viable option. Other entities like the RBI, and the NAS division of the CSO could also be included. He further pointed out that NIPFP is also currently compiling fiscal data at the state level. However, this database is not digitized. Complementary data relating to the components of aggregate demand (also published by NAS, CSO) is also available with NIPFP. It was also realized that including the state governments in the MoU would be a difficult task and might not be possible and therefore consolidated state-level data with the RBI could be used.
- 8. Mr. Indranil Bhattacharya explained in brief, the methodology for compilation of state-level data and making this data comparable across states. A concern raised by Dr. Rathin Roy was that the RBI does not publish raw data. Eventually it was decided that the Committee members from the RBI would make a presentation relating to the compilation of state-level fiscal data before the Committee. The presentation would also cover the issues of comparability of this data across states and the specific methodology followed by the RBI in this context. A recent issue in this context deals with the adjustment of UDAY scheme into the state's fiscal deficit data. Clarity on definitions of fiscal indicators and classification into revenue and expenditure items could also be provided.
- 9. Dr. Pinaki Chakraborty indicated the need to clearly list out the data that needs to be compiled. He enquired if the fiscal data that is intended to be compiled would pertain to the Central government, State governments, or almost 250,000 local governments. In his opinion it is not manageable to compile data at all 3 levels of government and manage it in a data warehouse.
- 10. At this juncture, the Chairman drew attention to ToR 3 of the Committee relating to the "compilation of granular data from primary sources and recommend suitable measures to

establish/revamp system for (i) processing and (ii) periodic audit through deep drive of integrated system for and recommend a nodal agency as data repository". This requires far more than just the budgetary data at the centre and the state level and is in the context of using granular data generated in newly established IT-enabled institutions. Two examples were briefly explained by him:

- **a.** PFMS- It gives an online account of intergovernmental fiscal transfers, both in terms of payments and receipts, payment of states' and local bodies' shares in central taxes respectively, grants of different kinds and utilization of such payments by the recipients from any of the public accounts namely consolidated or contingency fund at all levels of government. It has an interface with both the CGA and CAG. It was suggested by the Chairman to have a presentation on the working of PFMS. For this presentation, Dr Rathin Roy indicated that he would be able to invite Mr. Raju
- **b.** GSTN- It captures transaction level data that has fiscal implications. Hitherto capturing all these transactions would have been extremely difficult and prohibitively costly. But with the setting up of the GSTN, capturing such data at suitable levels of aggregation and frequency appears to be feasible. This is not only a source of fiscal data but also gives important macro signals. Again, a presentation on the dimensions and working of GSTN would be required. Accessibility of data available with the GSTN is an important issue which needs to be looked into.
- 11. Dr. Pinaki drew attention to the meeting with the Chairpersons, Co-chairpersons and Member Secretaries of 5 Committees constituted by the National Statistical Commission that took place in the Niti Ayog on 24 October 2016. In this meeting, Dr. Barman, NSC Chairman, suggested that these committees should look at the following things:
 - Identifying the data inputs, data source agencies and data definitions

Sharan who was intimately involved in the design of PFMS.

- Output based on input periodicity-In the context of fiscal data, linking the outlays at the level of implementation and outcome
- Methodology for aggregation of data at various levels
- Audit trails-audits at various levels
- System of online reporting of data wherever possible
- Master data management and data governance framework
- Development of dataset, data models including tools for multidimensional view and analysis

Further, given the vast mandate of each committee, Dr. Barman suggested that the Chairman of each committee could consider forming sub-groups so that the recommendations are finalized in a time-bound manner.

12. It was unanimously accepted that defining/ classifying fiscal statistics is crucial for aggregation and subsequently, analysis of this data. Dr. Rathin Roy chalked out the following layout:

Level of Government/ Fiscal Statistics	Revenue	Expenditure	Capital Receipts	
			Debt	Non-debt
Centre				
States				
Local				
Public Sector and Departmental				
Enterprises				

- 13. The Chairman pointed out that this could serve as the starting point. He suggested aggregation of the revenue, expenditure and capital receipts data for all three tiers of the government (which could be extended to public sector and departmental enterprises) at an annual, quarterly and monthly frequency. In the process, deficiencies and issues with the availability and accessibility of relevant fiscal data at all three levels of the government could be noted and recommendations could be made to resolve them. Dr. Pinaki indicated the challenge of obtaining revenue and expenditure data on a monthly basis for the state and local governments. At this juncture, the Chairman informed the Committee about the publication of monthly data on revenue and expenditure of the state governments by the CAG, although comparability of data may still be an issue. The CGA publishes fiscal data on a monthly basis for the central government.
- 14. Dr. Rathin Roy highlighted the need for identifying a minimum level at which fiscal data could be compiled. If unit level data is available for income tax but not for service tax, then it would render the database incomplete and create an asymmetry.
- 15. It was identified that most fiscal data for critical dimensions is available on a monthly basis, although with deficiencies. The issue is with their aggregation. It was noted that monthly data for central and state governments could be aggregated into a quarterly and annual frequency which can be reconciled with the annual data which is published in their Budget documents. It would be helpful for the Committee if a presentation from CGA and CAG could be arranged in order to understand the aggregation process clearly.
- 16. Another issue relating to both direct and indirect tax statistics that was pointed out by the Chairman pertained to the publication of fiscal data. As discussed in para 4, the Income Tax Department used to prepare a document called 'All India Income Tax Statistics' giving income tax collections as well as information on income tax base and number of assesses according to different rate categories. Although this document was prepared for departmental use but it was also accessible for the use of researchers. However, the compilation and publication of this document was discontinued in the early 90's. More recently, the CBDT published a set of data relating to such information for PIT and CIT as a one-time publication. This was soon after Thomas Piketty (author of Capital in the Twenty-First Century) had visited India and had lamented the lack of appropriately disaggregated direct tax data.
- 17. The CBIC has been maintaining a website for sharing indirect tax data with both assesses and general public. This website used to give valuable monthly information on customs and central excise collections (commodity-wise and commissionerate-wise) as well as service tax collections but for some reason, the website has not been updated since November 2014.
- 18. The Chairman highlighted various important sets of fiscal data which could be suitably captured. These include flows into and out of various funds of the respective governments including the Consolidated and Contingent Funds as well as the numerous public accounts both at the central and the state level including the National Small Saving Fund. There are also significant receipts from non-tax sources. There is a non-tax receipts portal which is public/open portal providing information on the collection of non-tax revenues but not at a continuous time frequency. Similarly, pension data is available from the Central Pension Accounting Office. However, publication of government salary and employment data is not taking place currently. Suitable data could also be sourced from the Department of Public Investment and Asset Management. High frequency compilation of the data on borrowing

and debt servicing is presently not available but three institutions which are involved in this process namely, Government Debt Office, the RBI and CAG do have the information and can develop the necessary strategy for compilation and aggregation. Adequate arrangements for reporting and monitoring of contingent liabilities (government guarantees) should also be instituted.

- 19. Dr. Rathin suggested that the starting point could be collating central and state government fiscal data. For this purpose, the Committed could be divided into task forces which would undertake identification of available fiscal data at central/ state level according to the above mentioned layout (para 10). In his opinion, fiscal data pertaining to local bodies and public sector undertakings could be taken up later.
- 20. Qualifying the discussion as mentioned in para 6, Dr. Pinaki highlighted the issue of comparability of state finance data. He indicated that although methodology for adjustments done by the FC to make the fiscal data at the state level comparable is reported, the related data is not maintained.
- 21. In line with Dr. Rathin's suggestion, the Chairman also recommended formation of two broad sub-committees- first, for examining the fiscal data available for central government, aggregation of this data at different frequencies and according to major fiscal heads (Centre's Fiscal Statistics). In the process, issues of data availability and publication or any other issue could be indicated and second, a similar exercise can be done for the state governments (States Fiscal Statistics). The RBI could take a lead in dealing with state-level fiscal data.
- 22. Mr. Indranil Bhattacharya indicated that as per IMF's SDDS requirement, the combined fiscal position of the Centre and States is currently being presented in September and April by the RBI in the RBI bulletin as well as in the Handbook of Statistics on Indian economy. Data for this is suitably aggregated and adjusted and hence these are comparable.
- 23. The Chairman summarized the presentations which will be required for the Committee members. These relate to PFMS, GSTN, methodology for aggregation used by the CAG and CGA, methodology used by the RBI for making the fiscal data for states comparable and the methodology used by them to combine data for the Centre and states.
- 24. Another concern that was raised related to the unsatisfactory data procurement processes of India's large number of local bodies. The budgetary accounts of local governments are not being compiled in a satisfactory way or being aggregated to provide the picture of local government budgetary operations for the state as a whole. There are classification related issues as well as issues in getting audited accounts. The FCs have been recommending from time to time about the need for uniformity in maintaining local government accounts in a suitable way. However the progress in this regard has been limited.
- 25. It was noted that one of the members of this committee, Mr. Santhosh Mathew is the Joint Secretary in the ministry of Rural Development. He could be contacted to understand collection of fiscal data at the local level and specific issues such as the conditionality of the grants given to local governments.
- 26. Dr. Rathin indicated that NIPFP would be willing to provide a Secretariat for this Committee on a cost basis and a budget has to be approved for this service. NIPFP would also be willing to host a consultant (probably a retired IES officer) who would carry out the task of writing to members/ external people and following up and also perform some preliminary analysis as and when required by the Committee. He could be working out of NIPFP or CSO as per NSC's choice.

- 27. Another important issue which was highlighted was that the potential users of fiscal data have to be identified because unless it is recognized that there is demand for such data, it would not be made available. In this context, Dr. Arbind Modi had indicated elsewhere that the tax department discontinued the data on All India Income Tax Statistics because it was perceived that there is no demand for such data. The Chairman suggested that as part of the activities of this Committee, a workshop needs to be conducted, which would involve the presence of all possible stakeholders who are potential users of fiscal statistics (accounting firms, banks, academic institutions, multilateral institutions, independent researchers and so on). Dr. Rathin indicated that he may be able to organize such a workshop. It was noted that most of the recent FCs had emphasized keeping local government data in as uniform a way as feasible. This would enable their aggregation first at the level of states and then at the level of the country. It was noted that between the Chairman, Dr. Rathin Roy and Dr. Pinkai Chakraborty, association with five FCs from the Tenth to the Fourteenth were represented and all of these recommended the need for compilation and collation of local government data.
- 28. It was recognized that many members of the Committee are "IT Heads" of specific divisions of various states: IT in-charge Maharashtra, IT in-charge budget UP, IT in-charge budget TN. These people were absent in the first meeting of the Committee. Although NSC was contacted for obtaining specific details of these officials, but no response came from them.
- 29. Further, in reference to the fourth ToR of the Committee relating to "examining the present system for dissemination of data and recommend measures for improvement consistent with international standard", it was recognized that the experience of certain countries which are more transparent in sharing of fiscal data and maintaining and updating such data regularly needs to be taken into account- identifying suitable and practical benchmarks for India.

Follow-Up Points

- 30. The next meeting was planned to be conducted sometime in May 2017. The following two presentations were planned for this meeting:
 - a. Mr. Raju Sharan may be requested to make a presentation on PFMS. This may be coordinated by Dr. Rathin Roy [as per discussion in para 8a].
 - b. RBI member may take the lead on making a presentation on various aspects of state-level fiscal data: methodology used by the RBI to make fiscal data across states comparable, methodology for combining Centre and state-level fiscal data to arrive at the combined fiscal position, definitions of various fiscal indicators used by the RBI and classification of items into revenue and expenditure flows [as per discussion in paras 6 and 21].

Annex 4: Recommendations on Maintenance of Data by the 14th Finance Commission

- 10. We recommend that the books of accounts prepared by the local bodies should distinctly capture income on account of own taxes and non-taxes, assigned taxes, devolution and grants from the State, grants from the Finance Commission and grants for any agency functions assigned by the Union and State Governments. In addition to the above, we also recommend that the technical guidance and support arrangements by the C&AG should be continued and the States should take action to facilitate local bodies to compile accounts and have them audited in time. (para 9.61)
- **16.** We are providing performance grants to address the following issues: (i) making available reliable data on local bodies' receipt and expenditure through audited accounts; and (ii) improvement in own revenues. In addition, the urban local bodies will have to measure and publish service level benchmarks for basic services. These performance grants will be disbursed from the second year of our award period, that is, 2016-17 onwards so as to enable sufficient time to State Governments and the local bodies to put in place a scheme and mechanism for implementation. (para 9.75)
- 17. To be eligible for performance grants, the gram panchayats will have to submit audited annual accounts that relate to a year not earlier than two years preceding the year in which the

Gram Panchayat seeks to claim the performance grant. It will also have to show an increase in the own revenues of the local body over the preceding year, as reflected in the audited accounts. To illustrate, the audited accounts required for performance grants in 2016-17 will be for the year 2014-15; for performance grants in 2017-18, the audited accounts will be for the year 2015-16; for performance grants in 2018-19, the audited accounts will be for 2016-17; and for performance grants in 2019-20, the audited accounts will be for 2017-18.

- 19. A detailed procedure for the disbursal of the performance grant to urban local bodies would have to be designed by the State Government concerned, subject to certain eligibility criteria. To be eligible, the urban local body will have to submit audited annual accounts that relate to a year not earlier than two years preceding the year in which it seeks to claim the performance grant. It will also have to show an increase in the own revenues over the preceding year, as reflected in these audited accounts. In addition, it must publish the service level benchmarks relating to basic urban services each year for the period of the award and make it publically available. The service level benchmarks of the Ministry of Urban Development may be used for this purpose. The improvement in revenues will be determined on the basis of these audited accounts and on no other basis. For computing the increase in own revenues in a particular year, the proceeds from octroi and entry tax must be excluded. In case some amount of the performance grant remains after disbursement to the eligible urban local bodies, the undisbursed amount should be distributed on an equitable basis among all the eligible urban local bodies that had fulfilled the conditions for getting the performance grant. (para 9.78)
- **25.** We suggest that the existing rules be reviewed and amplified to facilitate the levy of property tax and the granting of exemptions be minimised. The assessment of properties may be done every four or five years and the urban local bodies should introduce the system of self-assessment. We recommend that action be taken by the States to share information regarding property tax among the municipalities, State and Union Governments. (para 9.90)
- **41.** Considering the usefulness of a scientifically validated risk vulnerability indicator to measure the type, frequency and intensity of disasters, and also in view of the very wide responsibility cast on governments at different levels by the statute, we recommend that the

Union Government should expedite the development and scientific validation of the Hazard Vulnerability Risk Profiles of States. (para 10.34)

- **66.** Keeping in mind the importance of risks arising from guarantees, off-budget borrowings and accumulated losses of financially weak public sector enterprises when assessing the debt position of States, we recommend that both Union and State Governments adopt a template for collating, analysing and annually reporting the total extended public debt in their respective budgets as a supplement to the budget document. (para 14.24)
- 121. We recommend that both the Union and State Governments improve their forecasts, by adopting a more scientific approach for this process. Similarly, the fiscal responsibility legislations and estimates in the MTFPs should be backed by well-calibrated reasoning to justify the forecasts. When forecasts are out of line with past trends, it is important to make a detailed statement on the intended reforms necessary to enhance revenue productivity and rationalise expenditures. We also recommend that the Union and State Governments undertake measures to improve their cash management practices.
- 77. To enable wider dissemination of the manner in which this shared responsibility for a conducive fiscal environment is being discharged by the Union and State Governments, we recommend that the Union Government and the RBI bring out a bi-annual report on the public debt of the Union and State Governments on a regular and comparable basis and place it in public domain. (para 14.88)

Annex 5: Observations on Maintenance of Data by the 13th Finance Commission

- **11.** Records of landholdings of PSUs need to be properly maintained to ensure that this scarce resource is put to productive use, or made available for other public projects, or else, sold. (para 6.48)
- **13.** With reference to public sector undertakings: i) All states should endeavour to ensure clearance of the accounts of all their Public Sector Undertakings (PSUs). (para 7.95)
- **17.** With reference to accounting reforms:
 - i. The Government of India (GoI) should ensure uniformity in the budgetary classification code across all states. The list of appendices to the finance accounts of states also needs to be standardised. (paras 7.129 and 7.134)
 - ii. Details of contra-entries as well as the summary of transactions between the public account and the consolidated fund should be provided as a separate annex to the finance accounts of the states. (Para7.131)
 - iii. Public expenditure through creation of funds outside the consolidated fund of the states needs to be discouraged. Expenditure through such funds and from civil deposits should be brought under the audit jurisdiction of the C&AG. (paras 7.132 and 7.133)
 - iv. The following statements need to be provided with the finance accounts of states:
 - a. Comprehensive data on all subsidies. (para 7.135)
 - b. Consolidated information on the number of employees at each level, along with the commitment on salary. This statement should also include information on employees and their salary where such expenditure is shown as grants or booked under other expenditure. (para 7.136 & 7.137)
 - c. Details of maintenance expenditure. (para 7.138)
- **26.** The following disclosures should be made along with the annual Central Budget/MTFP:
 - i. Detailed breakup of grants to states under the overall category of non-plan and plan grants. (para 9.41)
 - ii. Statement on tax expenditure to be systematised and the methodology to be made explicit. (para 9.42)
 - iii. Compliance costs of major tax proposals to be reported. (para 9.43)
 - iv. Revenue Consequences of Capital Expenditure (RCCE) to be projected in MTFP. (para 9.45)
 - v. Fiscal impact of major policy changes to be incorporated in MTFP. (para 9.46)
 - vi. Public Private Partnership (PPP) liabilities to be reported along with MTFP. (paras 9.48 and 9.49)
 - vii. MTFP to make explicit the values of parameters underlying projections for receipts and expenditure and the band within which they can vary while remaining consistent with targets. (para 9.61)

- **48.** State Governments should appropriately strengthen their local fund audit departments through capacity building as well as personnel augmentation. (para 10.167)
- **50.** To buttress the accounting system, the finance accounts should include a separate statement indicating head-wise details of actual expenditures under the same heads as used in the budget for both Panchayati Raj Institutions (PRIs) and Urban Local Bodies (ULBs). We recommend that these changes be brought into effect from 31 March 2012. (para 10.177)
- **86.** To enhance the quality of statistical systems, we recommend a grant of Rs. 616 crore for State Governments at the rate of Rs. 1 crore for every district to fill in statistical infrastructure gaps in areas not addressed by the India Statistical Project (ISP). (para 12.101)
- **87.** A grant of Rs. 10 crore will be provided to each general category state and Rs. 5 crore to each special category state to set up an employees' and pensioners' data base. We also urge GoI to initiate a parallel effort for preparing a data base for its own employees and pensioners. (para 12.108)

Annex 6: Excerpts from Report of the National Statistical Commission on Fiscal Statistics

Fiscal Statistics

Introduction

10.8.1 Fiscal policy has a crucial bearing on macro-economic management within the frame of national economic policy and towards the attainment of the objectives of economic growth, equity and financial stability. Fiscal data serve to gauge the impact of fiscal policy on the Real, Financial and External Sectors of the economy. The magnitude and quality of data produced and disseminated are conditioned by the Constitutional requirements and institutional arrangements. In this Report, the discussion will focus on the status of Fiscal Statistics of the Central Government and State Governments and the issues involved in data collection and dissemination, which is based on the Report of the *Committee on Fiscal Statistics* appointed by National Statistical Commission.

10.8.2 In India, the sources of fiscal data generally are the Government budget documents. The Government referred to is the general Government, which comprises Central Government, State Governments, and Governments of Union Territories.

10.8.3 The Government fiscal management is governed by the system of Legislative Financial Control enshrined in the Constitution of India (*Articles* 112-117, 264-293). This involves an elaborate process of presentation, scrutiny and passing of an Annual Budget and specific Parliament or Legislative approval for Government's taxation and expenditure proposals. Fiscal accounts are maintained on an elaborate 6-tier system of function-cum-programme basis of classification. The top layers of accounting classification are the Major and Minor Heads. Below the level of Minor Heads, there are three more layers of accounting classification. The last level (6th level) is the 'Object Head' or the destination heads.

10.8.4 Fiscal data are also recast according to the economic and functional grouping of the activities. These are at present comprehensively compiled only in the case of the Central Government. Some State Governments also compile an economic and functional classification of the budgetary data.

Current Status

System of Data Collection and Dissemination

General Budget

10.8.5 The Office of the Controller General of Accounts (CGA) is vested with the responsibility of compiling the accounts of the civil ministries of the Government of India. The accounting set up in the ministries comprises a Principal Account Office (PrAO) at the ministry and a large number of Pay and Accounts Offices (PAOs), which form the basic accounting unit. The PAO maintains item-wise accounts of all the transactions involving Consolidated Fund, Contingency Fund and Public Accounts. Various subsidiary accounts such as Loan and Fund accounts are also maintained by the PAOs.

- **10.8.6** The Government accounts compiled by the PAOs are consolidated on a monthly basis in the PrAO at the ministry. The consolidated accounts of the ministry are rendered to the CGA for further consolidation and dissemination through the website with a time lag of one month. The data provide monthly actual (un-audited) and cumulative position of major items of receipts, expenditures and fiscal balance in relation to the budget estimates of the current fiscal year as well as a comparative position for the corresponding period of the previous year. The monthly fiscal data for the State Governments are compiled by the Office of the Accountant General (AG) of the respective states with a lag of two-three months but are not disseminated to the public at present.
- **10.8.7** The CGA also prepares the annual accounts of the Government, comprising the Union Government Finance Accounts and the Union Civil Appropriation Accounts. These documents are presented before the Parliament after their statutory audit by the Comptroller and Auditor General of Accounts (CAG). These are published as *Finance Accounts* of both Central and State Governments separately. The combined accounts of both the Governments have not been published by the CAG relate to 1985-86 and not available thereafter.
- **10.8.8** The principal source of fiscal data is the budget documents presented annually generally in February or March to the Parliament or State Legislature. The fiscal data presented in the budget cover budget estimates (BE) for the next fiscal year, revised estimates (RE) for the current fiscal year and final account figures (un-audited) for the previous year. The budget documents also provide time series data on select fiscal variables.
- **10.8.9** At present, the coverage of Indian Fiscal Statistics encompasses finances of Central Government and State Governments. The Government data comprises receipts (debt and non-debt components) and expenditure (revenue and capital). The period of data coverage under the minor and major heads of receipts and expenditures are three years namely, accounts for the previous year, RE for the current year and budget estimates (projection) for the next year.
- **10.8.10** The details on the financial position of Public Sector Enterprises both at the Central and State levels are made available with considerable time lag. Financial results of commercial undertakings like Posts and Telecommunication, etc. at the Central level are limited to the extent of those available in the budget documents. The Railway finances are available, in detail, separately in the Railway Budget.
- **10.8.11** The combined budgetary position of the Central and State Governments for the major heads of receipts and expenditures are generally published with a time lag of two years in the *Indian Public Finance Statistics*, published by the Ministry of Finance, Government of India. The consolidated fiscal statistics disseminated by the Ministry of Finance are also classified into broad categories of developmental and non-developmental expenditures.
- **10.8.12** The Planning Commission, Government of India disseminates a large volume of data on Fiscal Statistics relating to Annual as well as Five Year Plans both sector- wise outlays and mode of financing of the Central and the State Governments.
- **10.8.13** The Finance Commission, Government of India is another major source of data on Fiscal Statistics. The data disseminated through the Reports of the Finance Commission mainly includes the formula-based resource transfers from the Centre to the States and *inter se* distribution of devolution of resources under the awards of the Finance Commission.

10.8.14 The Reserve Bank of India (RBI) compiles and publishes general Government fiscal data, including debt, derived from the budget documents of the Central Government and State Governments. The data disseminated by the RBI are as under:

- e. The accounts of Central Government are analysed and published as an article on Central Government Finances in the RBI Monthly *Bulletin* within a period of two months after the presentation of Union Budget.
- f. The accounts of Indian Railways are analysed and published as an article on Railway Finances in the RBI Monthly *Bulletin* within a period of two months, after the presentation of the Railway Budget.
- g. The accounts of the State Governments and NCT Delhi are compiled, analysed and published as a comprehensive Study on Finances of State Governments. This involves two-stage data dissemination. First, a quick summary covering the aggregate position of State Governments finances, based on budgetary data, is prepared and published as an article in the RBI Monthly *Bulletin*, followed by a detailed study published separately within a period of 6 to 7 months of the presentation of the State budgets.
- h. The accounts of the Central Government and State governments along with the NCT Delhi are consolidated into Combined General Government Fiscal Data and published in the *RBI Annual Report* and *Handbook of Statistics on Indian Economy*. The data disseminated by the RBI through its publication also include details on net RBI credit to Government, outstanding liabilities and explicit guarantees of both Centre and State Governments.
- i. Reserve Bank also compiles the Consolidated General Government Fiscal Data for the purpose of the Special Data Dissemination Standards (SDDS) of the International Monetary Fund. The data are disseminated through the RBI website and published in the RBI Monthly *Bulletin*.

Tax Statistics

10.8.15 The Budget documents of Centre and State Governments provide details of taxes, both direct and indirect taxes. The authority to levy taxes is divided between the Union Government and the State Governments under the relevant Acts. The Union Government levies direct taxes such as personal income tax and corporate tax, and indirect taxes like custom duties, excise duties and central sales tax. The States are empowered to levy State sales tax and other local taxes like entry tax, octroi, etc.

10.8.16 The Department of Revenue, Ministry of Finance is responsible for all matters relating to the administration of Central taxes. The Central Board of Direct Taxes (CBDT) administers the direct taxes through its subordinate organisation namely, Income Tax Department while the Central Board of Excise and Customs (CBEC) is responsible for the administration of indirect taxes through Departments of Customs and Central Excise.

10.8.17 The Research and Statistics Wing of the Directorate of Income Tax (RSP&PR) of the CBDT is engaged in the collection and compilation of direct tax statistics from 300 field units located throughout the country. The data flow from the field offices of the Commissioners and Chief Commissioners of income tax to the Directorate of Income Tax (RSP&PR), where they are consolidated at the all-India level. The Directorate prepares various statistical statements and reports of different periodicities (monthly, quarterly and annual) based on the information

received from the field offices. These reports and statements, essentially meant for departmental use, cater to the needs of the CBDT and Ministry of Finance.

10.8.18 The CBEC is responsible for levying, collecting and monitoring of Central excise and custom duties all over the country. The data pertaining to Central excise and customs are collected under Central Excise and Custom Law and Rules framed thereunder. Statistics relating to Central excise are generated on the basis of RT 12-return, a statutory return filed monthly by each Central excise assessee. The data flow from the range office (lowest formation of Central excise) to Commissionerate office through divisional offices and finally, to the Directorate of Statistics and Intelligence, which in turn submit the Reports to CBEC.

Deficiencies

10.8.19 The major deficiencies in the present system are listed in the following paragraphs:

General Budget Data

Classificational Limitation

10.8.20 Government accounts are maintained on a cash basis, i.e. transactions and events are recognised when cash is received or paid. Internationally, many Governments are switching over to accrual-based accounting. For a uniform system for compiling fiscal data and also for cross-country comparison, the Manual on Government Finance Statistics is being revised by the International Monetary Fund to enable switching from cash to accrual accounting system.

10.8.21 In the case of some State Budgets either the data on accounts (actuals) are not available or the details given are limited. In some cases, only BE and RE details in the expenditure documents are being made available. In some cases, receipt budget documents are not being prepared.

Coverage

10.8.22 General Government constitutes only a segment of the public sector. The public sector undertakings are of three types namely, Government departments engaged in commercial activities such as the Railways, Corporations created under Acts of Parliament or the State Legislatures and companies having majority shareholding by the Government. In addition, there are societies promoted by government that function under separate laws applicable to them. The RE and BE of the internal and extra budgetary resources (IEBR) of the Central Public Sector Enterprises are available in the budget documents but the accounts data are not being published. Unlike the General Government, these Public Sector undertakings are not constitutionally bound to present their Annual Financial Statement, although the CAG makes an annual scrutiny of their accounts. The financial statements of these undertakings are finalised with a considerable time lag and are not uniform. Thus, the consolidated fiscal data capture only a part of the public sector.

10.8.23 The fiscal data pertaining to local Governments are not systematically codified nor presented as the budgetary operations of local Governments are generally subsumed in the States' or Central budgets. The database relating to the local authorities for the requirement of the national accounts statistics needs to be strengthened.

10.8.24 The external debt of Government of India as presented in the budget documents is at book value. Hence, it does not reflect the true debt position of the Centre at any particular point of time.

10.8.25 The use of disclosure norms adopted in the standard budgetary practices is limited in the case of State budgets. Most of the State Government budgets do not provide the basic deficit indicators like gross fiscal deficit, revenue deficit and primary deficit. Information on subsidies (both implicit and explicit subsidies), resource position of State level Public Enterprises, budgetary support to PSUs, information on outstanding liabilities are not generally presented in the State budget. The State Governments also do not provide high frequency data on major fiscal indicators on a monthly basis as is the practice followed by the Centre. A 'Core Group on Voluntary Disclosure Norms for State Governments' constituted with the select group of Finance Secretaries under the initiatives of the RBI has gone into these issues and has made certain recommendations. These include among others the introduction of a Budget at a Glance (BAG) along the lines presented in the Central Government budget. Ten State Governments have already introduced 'BAG' in their budgets for 2000-01. The Committee has also recommended the introduction of a Budget Summary as a medium-term measure for enhancing transparency in the State budgets.

10.8.26 Though the Fiscal Statistics released by the Government of India are consistent with the IMF manual on Government statistics and the country is fulfilling the requirement under SDDS, there are certain areas of data gap in relation to the IMF code of good practice on Fiscal Transparency. These are *inter alia* the deficiency in compiling and publishing some of the important indicators of fiscal policy, for instance: operational balance, tax expenditures, quasifiscal activities, net worth and also information relating to fiscal risks such as contingent liabilities, impact of variation in the assumption on fiscal forecasts. There are also some indicators, which reflect the structural weakness of Government finances such as structural or cyclically adjusted deficit and liquidity balance, which are not covered in the Indian Fiscal Statistics. These gaps were serious in respect of fiscal data pertaining to State finances.

10.8.27 The recently introduced Fiscal Responsibility and Budget Management Bill, which if passed, and becomes an Act would provide the necessary legal and institutional arrangement to make the budget processing more transparent in respect of the budget for the Centre.

Tax Statistics

10.8.28 The budget presents only the aggregate heads of major taxes both at the level of the Centre and State, and does not reflect the sector-wise collection or assessee's status-wise details. The estimates for State-wise devolution of taxes and duties are disseminated through the budgets. Details regarding tax refunds, tax arrears, accruals, cumulative collected for the previous years are not reflected in the budget. Similarly, only estimates are available for additional resource mobilisation measures proposal announced in the Budget. Tax expenditures arising in the context of various exemptions that are extended under various tax laws, are not reflected in the budget. The *All India Income Tax Statistics* (AIITS), an annual publication of the Income tax Department is based on a very small sample size and published with a considerable time lag.

Conclusions and Recommendations

10.8.29 In the foregoing sections, the current status of the fiscal data is assessed from the point of view of adequacy, timeliness and reliability. Such analysis revealed that the Central Government disseminates a detailed data set on Fiscal Statistics while the status of the States is not relatively robust. In view of the detailed review presented above, the Commission recommends the following:

General Budget Data

- (i) The Expenditure Budget of Central Government provides data on Budget Estimates and the Revised Estimates of Internal and Extra Budgetary Resources (IEBR) of the Central Public Sector Enterprises. The account (actuals) figures on resources raised by these enterprises against the Budget Estimates (BE) and Revised Estimates (RE) are not available. Therefore, the details of actuals of IEBR (including the amount of External Aid) should be published in the Budget.
- (ii) The accounts data on State-wise distribution and devolution of income tax, basic and additional excise duties, etc. are not published in the Receipt Budget of Government of India while the Budget Estimates (BE) and Revised Estimates (RE) are available. The account data on amounts of devolution actually transferred to the States are available elsewhere in the publications of Ministry of Finance and the Planning Commission. Therefore, the accounts data should be provided in the Budget documents for the subsequent years for the purpose of consistency.
- (iii) Tax expenditure, which arise in the context of various exemptions that are extended under various tax laws, are yet to be quantified. Therefore, the details on both tax expenditure and implicit subsidies, tax arrears and tax refunds should be provided in the budgets of the Central and the State Governments.
- (iv) The Combined Finance and Revenue Accounts published by the Comptroller and Auditor General of Accounts (CAG) is the only source where the Fiscal Statistics of both the Centre and individual States are published. At present, there is a considerable time lag in this publication. This publication should be released promptly and regularly.
- (v) The detailed data of State Finances on a comparable basis is not available in the country. Though the RBI does publish an annual consolidated study, there persists a need to have a detailed and comparable data set for each State individually and consolidated. There are significant differences in the budgetary practices between different States. There has to be a uniform classification of a proper plan to classify the data on a comparable basis, eliminating inter and intra-Government transfers. The Central Government should therefore, ensure that such data are compiled and disseminated on an early basis.
- (vi) No published information is available on various centrally sponsored schemes. Therefore, the data on financing pattern of centrally sponsored schemes in different States and the expenditures incurred in different States from Central funds and States' own contributions should be compiled and disseminated along with the Budget documents.
- (vii) The State Governments do not provide high frequency data on major fiscal indicators on a monthly basis as is the practice followed by the Central Government. Therefore, the State Governments should make available to the public the data on major fiscal variables on a monthly basis.

- (viii) To assess the current system of accounts and budgets of local bodies, and to establish uniform budget practices for local bodies on the pattern of Central and State Governments, a system of consolidation of accounts by the States should be evolved and thereafter followed at national level. At the initial stage, the accounts of bigger local bodies such as those of the metropolitan cities, municipal corporations and municipalities should be taken up completely, while the accounts of smaller bodies be covered through suitably designed sample surveys. The securities issued by the local bodies should be published in the State Government budgets.
- (ix) The issue of providing guarantees has significant implications for the sustainability of the fiscal position of the Governments Central and States. Further, some forms of guarantees, like the letters of comfort issued by State Governments to banks and financial institutions, are in nature of implicit guarantees, which are not included in the present estimates of guarantees in India, but are internationally treated as guarantees. Therefore, adequate arrangements for reporting and monitoring of guarantees granted by Central and State Governments should be instituted.
- (x) The draft Manual on Government Finance Statistics 2000 of the International Monetary Fund (IMF) favours the revised principle of recording the flows on accrual basis switching over from the current system of cash basis. Accordingly, the Government may consider, in due course, dissemination of Fiscal Statistics on an accrual basis as per advice of the Comptroller & Auditor General of India (CAG).

Tax Statistics

- (i) The details regarding the tax records, revenue as raised, revenue foregone on account of concessions contained in the budget proposals, receipt on tax arrears of the previous years and taxes collected through special schemes are not separately indicated. This data in gross and net terms should be given in the Budget Documents in a more transparent and detailed manner.
- (ii) The data on tax revenue of Central Government should be disseminated promptly and State wise break-up made available.
- (iii) The data published by the Directorate of Income Tax (RSP&PR) in its *All India Income Tax Statistics* (AIITS) are based on estimates derived from a small sample size and is therefore rendered unrepresentative. Therefore, the sample size and design should be modified to make it more representative and broad-based considering the manifold increase in the number of assessees. Further, the time lag in the publication should also be reduced.
- (iv) The computerisation and networking of Field offices of the Central Board of Direct Taxes (CBDT) and Central Board of Excise and Customs (CBEC) should be completed on a priority basis for improving the data quality, better management and speedier transmission of data from the field offices to the Directorates at the Centre. To generate a comprehensive database on various aspects of Direct and Indirect Tax Statistics, the CBEC and CBDT should generate profiles of all tax assessees by computerisation of various returns filed by them.
- (v) The organisational set up for collection of statistics in the field offices of CBDT and CBEC should be strengthened. The Research and Statistics Wing, Directorate of Income Tax should be the nodal agency on all statistical activities and should function directly

under CBDT. A Research Unit should also be set up in CBDT to undertake research studies on various aspects of tax planning.

Institutional

(i) A data warehouse for Fiscal Statistics at the National level within the Department of Economic Affairs (DEA) should be established. Such an institutional mechanism is intended to collect, compile and store the data generated and disseminated by various official agencies which would not only help to build up a comprehensive database on Indian Fiscal Statistics but also to identify the data gaps at the macro and micro levels.

List of References

- 1. Rivas & Crowley (2018), "Using Administrative Data to Enhance Policymaking in Developing Countries: Tax Data and the National Accounts", IMF WP/ 18/175
- 2. Srivastava and Trehan (2018), "Managing Central Government Finances: Asymmetric Seasonality in Receipts and Expenditures", Global Business Review (Forthcoming)
- 3. Reports of Finance Commissions, Finance Commission India (http://fincomindia.nic.in/)
- 4. Report of the National Statistics Commission, 5th September 2011, MOSPI, GoI (http://mospi.nic.in/report-dr-rangarajan-commission)
- 5. Report on 'Compliance of FRBM Act 2003' CAG (Report No. 27; 2016)
- 6. Public Financial Management System-PFMS O/o Controller General of Accounts, Ministry of Finance ('*About PFMS*'; http://164.100.129.32/Users/LoginDetails/Login.aspx)
- 7. "Challenges of Indian Tax Administration" (2016), Rajiva Ranjan Singh, published by LexisNexix
- 8. Report of the High Level Expert Committee on 'Efficient Management of Public Expenditure, July 2011 (http://www.planningcommission.gov.in/)
- 9. Piketty, Thomas. (2014) Capital in the Twenty-First Century. Cambridge, MA: Harvard University Press
- 10. Handbook of Statistics on Indian States, 2016, 2017 and 2018, RBI (https://m.rbi.org.in/SCRIPTS/AnnualPublications.aspx?head=Handbook%20of%20Statistics%20on%20Indian%20States).
- 11. Reserve Bank of India, State Finances: A Study of State Budgets (Various issues), (https://m.rbi.org.in/Scripts/AnnualPublications.aspx?head=State%20Finances%20:%20A%20Study%20of%20Budgets).
- 12. Indian Public Finance Statistics (Various Issues), Department of Economic Affairs, Government of India (https://dea.gov.in/indian-public-finance-statistics).
- 13. Tax Administration Reform Commission. "Tax Administration Reform in India: Spirit, Purpose and Empowerment." (2014), Tax Administration Reforms Commission, Ministry of Finance, Government of India (https://dea.gov.in/sites/default/files/TARC2ndReport_0.pdf)
- 14. Controller and Auditor General of India, Duties, Power and Conditions of Services Act (https://cag.gov.in/content/duties-power-and-conditions-services-act)
- 15. Controller and Auditor General of India, State Accounts (various years) https://cag.gov.in/state-accounts
- 16. Annual Report 2017-18, Ministry of Heavy Industries and Public Enterprises, Government of India. (https://dhi.nic.in/writereaddata/UploadFile/HEAVY_ENGLISH_ANNUAL_REPORT_2_017%2018_Eng.pdf)
- 17. Public Enterprises Survey 2016-17, Department of Public Enterprises, Ministry of Heavy Industries and Public Enterprises, Government of India. (https://dpe.gov.in/public-enterprises-survey-2016-17)

- 18. Barman, R. B (2018), "Indian Official Statistics: Digital Transformation to Honour Citizens", Economic and Political Weekly, Vol. LII Nos. 26 & 27: 64-74
- 19. Ohlhorst, Frank J. (2012), "Big data analytics: turning big data into big money". John Wiley & Sons
- 20. Debrun, X., et al (2013), "The functions and impact of fiscal councils", IMF Policy Paper
- 21. Debrun, X., et al. (2017), "The Fiscal Council Dataset: A Premier to 2016 Vintage", IMF Background Paper
- 22. Beetsma, Mr Roel MWJ, et al. (2018), "Independent fiscal councils: recent trends and performance", IMF Working Paper No. 18/68
- 23. Nakamura, T. (n.d.). *Tax Expenditures: A Comparative Study of the Tax Subsidies in Selected OECD Countries*. Retrieved December 2014, from World Finance Conference: http://world-finance-conference.com/papers_wfc2/532.pdf
- 24. OECD. (2010). Tax Expenditures in OECD Countries
- 25. Ministry of Finance, Canada. (2010). Tax Expenditures: Notes to Estimates/Projections 2010.