

**REPORT  
OF  
THE COMMITTEE  
ON  
FINANCIAL SECTOR STATISTICS  
(May 2018)**

**CONSTITUTED  
BY  
NATIONAL STATISTICAL COMMISSION**

## Request for comments and suggestions on the Reports of Committees constituted by NSC

NSCs vide letter No.8(64)/2010-NSC dated 05.10.2016 constituted 5 professional committees to examine potential improvement in methodology and database related issues pertaining to estimation of GDP within the broad framework of SNA 2008. These committees are 1) Committee on Real Sector Statistics, 2) Committee on Financial Sector Statistics, 3) Committee on Fiscal Statistics, 4) Committee on Online Reporting System and 5) Committee on Analytics.

Four of the above committees submitted their reports in the 102<sup>nd</sup> Meeting of the National Statistical Commission held on 16-17th July, 2018 under the Chairmanship of Dr R B Barman, Chairperson, NSC at Sardar Patel Bhawan.

The draft reports of these committees are placed in the public domain to facilitate wider public consultation. The NSC welcomes comments and suggestions on the reports at the following address by 30<sup>th</sup> September, 2018:

National Statistical Commission  
NSC Secretariat, Room No-305,  
3<sup>rd</sup> Floor, C-Wing, Pushpa Bhawan, New Delhi – 110062  
Email: [nsc-secretariat@gov.in](mailto:nsc-secretariat@gov.in)

It may be noted that the NSC does not necessarily agree with the views, data and other contents of the reports.

**Letter of Transmittal**

Dr. R. B. Barman  
Chairman,  
National Statistical Commission (NSC),  
Ministry of Statistics and Programme Implementation  
Government of India  
C-Wing, 3rd Floor, Pushpa Bhavan,  
New Delhi - 110062

May 15, 2018

Dear Sir,

**Report of the Committee on Financial Sector Statistics**

We have great pleasure in submitting the report of the Committee on Financial Sector Statistics which was constituted to review the existing system for collection and processing of Flow of Funds (FoF) statistics; explore the possibility of providing State level estimates; recommend suitable measures to improve timelines; revamp the system for processing and periodic audit with the aim to disseminate data consistent with international standard. The Committee has made its best efforts to address these issues. The Committee hopes that the recommendations and suggestions made in the report will improve the FoF compilation system in India. We sincerely thank you for entrusting us with this important responsibility.

With regards,  
Yours sincerely,



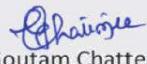
(Ravindra H. Dholakia)  
Chairman

<i>sdl-</i> (K.G.K. Subba Rao) Non-Official Member	<i>sdl-</i> (N.R. Bhanumurthy ) Non-Official Member	<i>sdl-</i> (Deepak Sethia) Non-Official Member	<i>sdl-</i> (Jayanth R. Varma) Non-Official Member
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<i>sdl-</i> (T. Rajeswari) Member	<i>sdl-</i> (Geeta Singh Rathore) Member	<i>sdl-</i> (Sarat Kumar Malik) Member	<i>sdl-</i> (G.S. Chawla) Member
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<i>sdl-</i> (Anindita Sinharay) Member	<i>sdl-</i> (Amitava Saha) Member	<i>sdl-</i> (Anupam Prakash) Member	<i>sdl-</i> (Y.K. Gupta) Member
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(Goutam Chatterjee)  
Member Secretary



## Index

<b>Chapter No</b>	<b>Chapter Name/ Section/ Sub-Section/ Annex</b>	<b>Page No.</b>
	Preface	vi - ix
	List of Abbreviations	x - xiii
<b>Chapter 1</b>	<b>Background</b>	<b>1 - 28</b>
	Section I : Introduction	1
	Section II : Sectors and Instruments Covered in India's Flow of Funds Accounts	4
	II.1 Institutional Sectors	4
	II.1.1 Financial Corporations	5
	II.1.2 Non-Financial Corporations	6
	II.1.3 General Government (GG)	6
	II.1.4 Rest of the World (RoW)	6
	II.1.5 Household and Non-profit institutions Serving Households (NPISH)	7
	II.2 Instruments Covered	7
	Section III : Approach of the Committee and Brief Proceedings	7
	Section IV : International Position on Compilation of FoF Accounts	9
	Section V : Organisation of the Report	11
	Annex 1.1 : Committee on Financial Sector Statistics - List of Members	12
	Annex 1.2 : Target and Encouraged Sectors for Dissemination of Financial Accounts Data	13
	Annex 1.3 : Target and Encouraged Instruments for Dissemination of Financial Accounts	15
	Annex 1.4 : Availability of Data on Major Instruments for all Major Sectors of the Economy	16
	Annex 1.5 : Sectors and Instruments for Collecting FWTW Information – Quarterly and Annual	17
	Annex 1.6 : Detailed Template for Collecting FWTW Information – Quarterly and Annual	18

**Index**

<b>Chapter No</b>	<b>Chapter Name/ Section/ Sub-Section/ Annex</b>	<b>Page No.</b>
<b>Chapter 2</b>	<b>Recommendations of Earlier Committees - Implementation Status</b>	<b>29 - 50</b>
	Section I : Introduction	29
	Section II : High Level Committee on Estimation of Savings and Investment (2009) – Relevant Recommendations and Implementation Status	30
	Section III : Recommendations of the Working Group (WG) on Compilation of FoF Accounts of the Indian Economy (2015) - Implementation Status	39
	Section IV : Role of the Committee	50
<b>Chapter 3</b>	<b>Current Status of the Compilation of the Flow of Funds Accounts of the Indian Economy</b>	<b>51 - 89</b>
	Section I : Introduction	51
	Section II : Sources of Data	52
	Section III : Issues in FoF Compilation and Suggestions	52
	Section IV : Compilation of FoF for Private Corporate Business Sector – An Exploratory Analysis	60
	IV.1 Framework of the Analysis	60
	IV.2 Estimates of Select Variables for 2014-15 and 2015-16	61
	IV.3 Scope of Further Work	63
	Section V : Statistical Discrepancies in the RBI and the CSO Estimates of Financial Accounts	64
	Section VI : Quarterly Compilation of FoF	68
	VI.1 Methodology	69
	VI.2 Data Issues	69
	VI.3 Discrepancy in Quarterly and Annual Data	71
	Section VII: Strengthening of Data Collection System (for Macro-micro Linkages) and Data Dissemination	71
	VII.1 Additional Fields in the Existing Databases	72
	VII.2 Integrated Data Warehouse Networks	73
	VII.3 Strengthening of Statistics on Institutional Sectors with Higher Frequency	73
	VII.4 Other Recommendations	75
	Annex 3.1 : Flow of Fund Accounts of the Indian Economy: Sources of Data	77
	Annex 3.2 A: Model Equation	80
	Annex 3.2 B: Regression Results for the Year 2014-15	82

**Index**

<b>Chapter No</b>	<b>Chapter Name/ Section/ Sub-Section/ Annex</b>	<b>Page No.</b>
	Annex 3.2 C: Regression Results for the Year 2015-16	86
<b>Chapter 4</b>	<b>Flow of Funds compilation for Local Governments</b>	<b>90 - 121</b>
	Section I : Introduction	90
	I.1 SNA 2008 on Local Government	90
	I.2 Efforts of the RBI in Compiling Local Bodies Data	90
	I.3 Structure and Accounting Systems of Local Bodies in India	91
	I.3.1 Rural Local Bodies	91
	I.3.2 Urban Local Bodies	92
	I.4 Approach of the Committee on Capturing Local bodies Data	93
	Section II : Issues in Data Collection from Local Bodies in India	93
	II.1 Availability of Rural Local Bodies' Data	93
	II.2 Discussions with Government Officials	96
	II.2.1 Issues in Fund Flow Mechanism	96
	II.2.2 Issues Relating to Technical Support and Multiple Software	96
	II.2.3 Other Issues	97
	Section III : Status of Data Collection by the CSO	97
	III.1 Scope for Improvement	98
	Section IV : Format for Capturing Local Bodies' Data for FoF	99
	Section V : Discussions with the Representatives of AIILSG and DMA Maharashtra	99
	Section VI : Way Ahead	100
	Annex 4.1 : Major Items Covered under the RBI Survey on "Finances of Local Authorities"	103
	Annex 4.2 : Common template for Combined Requirement of Compilation of National Accounts (Sequence of Accounts) and FoF from Local Bodies	107
	Annex 4.3 : Flow of Funds Data for Local Bodies in	

**Index**

<b>Chapter No</b>	<b>Chapter Name/ Section/ Sub-Section/ Annex</b>	<b>Page No.</b>
	Himachal Pradesh	121
<b>Chapter 5</b>	<b>Estimating Flow of Funds at State Level: An Approach and Some Issues</b>	<b>122 - 138</b>
	Section I : Introduction	122
	Section II : Conceptual Challenges for Measuring FoF at State Level	123
	Section III : Data Availability and Gaps	130
	Section IV : Recommendations and Future Directions	136
<b>Chapter 6</b>	<b>Recommendations</b>	<b>139 - 147</b>

## PREFACE

In early 2000, the Government of India appointed the National Statistical Commission, first of its kind, to critically examine the deficiencies of the present statistical system and suggest remedial actions with an aim to bringing out adequate data of high quality with the desired timeliness. The Commission made wide ranging recommendations covering all the sectors of the Indian economy. Subsequently, based on the recommendation of Dr. C. Rangarajan, the then Chairman of the Economic Advisory Council, the GoI made a permanent National Statistical Commission (NSC), an autonomous body that would reduce the problems faced by the statistical agencies in the country in relation to collection and dissemination of data.

The present NSC (Chairman: Dr. R.B. Barman) in 2016 appointed five professional Committees covering real sector statistics, financial sector statistics, fiscal statistics, online reporting system and analytics. I have the privilege of chairing the Committee on Financial Sector Statistics (CFSS).

In a mature advanced economy, the financial sector statistics provide the counter part of the real sector transactions and thereby a better understanding of the actual working of the economy. In a developing economy like India, where the structure keeps changing significantly over time and where several segments are not operating in a formal environment, the financial and real sector flows are not likely to match satisfactorily. Statistics in both the sectors are inevitably evolving and maturing over time. We have, therefore, to keep revising and updating concepts, methodologies and data sources to remain relevant and sensitive to the information needs of policy making and academic research. The present Committee is an effort in this direction.

The economy is conceptualized as consisting of four broad sectors, viz. the business sector, government sector, foreign sector and the household sector. The first three sectors are independently defined with clear scope and content. The household sector is the residual sector incorporating everything other than the first three sectors defined as comprehensively as possible. The interactions and interrelations among these four sectors provide extremely useful framework for the policy and academic research.

The business sector is further divided into financial and non-financial sectors. The main use of the Flow of Funds (FoF) statistics is to identify the net borrower and net lender sectors and also how the former is financed by the latter, because as is well-known the impact of unanticipated inflation depends on these characteristics. Economies differ sharply in terms of these characteristics of the four sectors. Similarly, the extent and magnitude of financial saving in the economy provided through FoF are again very critical parameters determining the need and urgency of the fiscal discipline by the governments. Thus, FoF statistics are crucial inputs for important aspects of both the monetary policy and fiscal policy in the country.

The first meeting of the Chairmen of the five professional Committees with Dr. Barman set the scope of work of each Committee. It was decided that the Committee on Financial Sector Statistics would concentrate on the methodology for compilation of the FoF statistics in India. FoF is indeed the most complex system in the National Accounts which requires capturing almost all financial transactions in the economy with identification of the instruments and the agencies involved in each. The System of National Accounts (SNA) sets the international standard for compilation of FoF along with other components of NAS. The Committee observed that India is largely compliant with the SNA 2008, the latest standard - thanks to the examination done by the Working Group on Compilation of Flow of Funds Accounts for the Indian Economy, under the Chairmanship of Shri Deepak Mohanty in 2015. Thus, the Committee concentrated on the few remaining areas to see whether further progress can be done in these. However, major emphasis laid by us was on improving the timeliness and the consistency of the FoF. To improve the timeliness, the Committee stressed on the need for relying more on collection of a thin sample and studying its relationship with the universe rather than using some historical ratios in each period. As regards the consistency, the major problem is considerable heterogeneity in the information system maintained by different agencies which makes reconciliation of the data near impossible.

Weaknesses in the Indian co-operative sector's data are well known - information on Primary Agricultural Credit Societies (PACS) is still hard to come by. It is now learnt that the NAFSCOB has developed a system for online collection of important statistics

related to PACS. Besides the co-operative sector, another weak area is the local government sector comprising of large number of rural panchayats. Despite the emphasis given by successive Finance Commissions, not much progress has been made in development of a uniform system of double entry book-keeping at the panchayat level. The Committee has devised a format for collection of data from the local bodies that would serve the requirement of the CSO for compilation of the GDP and the RBI for compilation of the FoF. The Committee also looked at two other refinements. One is the compilation of the FoF at the state level; and the other is release of FoF at quarterly frequency covering the financial sector to start with.

While all members of this Committee have substantially enriched the deliberations to their best abilities, I must acknowledge significant contribution made by the non-official members – Dr. K.G.K. Subba Rao, Dr. Deepak Sethia, Dr. N.R. Bhanumurthy, and Dr. J.R. Varma. Their inputs have enhanced the quality of our recommendations. Shri V.K. Srivastava, Director, DEPR, Shri A. Shukla, Assistant Adviser, DEPR and Dr. Tarun Saxena, Assistant Adviser, DSIM at RBI also contributed immensely to the discussions and content of the report of the Committee. Shri T. Rajeshwar Singh, Assistant Adviser, DSIM helped the Committee for the exploratory econometric exercise with the corporate sector data.

The Committee benefitted from the insights provided by the members of All India Institute of Local Self-Government (AIISLG), specially invited for one of the meetings, regarding the working of the urban local bodies. Similarly, an official from the PFRDA invited for one of the meetings of the Committee shared the information base on NPS and other Pension accounts maintained by them. The Secretariat at the DSIM, RBI arranged for all the logistics during the tenure of the Committee and has played a commendable role in bringing out the proceedings of the Committee at regular intervals as also in finalisation of the Report of the Committee under the able and effective guidance of Dr. Goutam Chatterjee, the Member Secretary of the Committee. Contributions made by Shri Haridwar Yadav, Shri Vivek Kumar, Assistant Advisers and Shri T.B. Sreejith, Research Officer in DSIM during finalisation of the Report are acknowledged.

*Report of the Committee on Financial Sector Statistics, 2018*

It is hoped that the recommendations of the Committee will be useful for improving the quality of the FoF for India in line with International prescriptions. RBI may work along the lines suggested herein while compiling the next release of the FoF to the extent possible and that is why we have not attempted such an exercise as a part of this Report.

Ravindra H. Dholakia  
Date: May 15, 2018

### **Abbreviations**

ADB	Asian Development Bank
ADC	Autonomous District Council
AG	Accountant General
AIDIS	All-India Debt and Investment Survey
AIF	Alternative Investment Fund
AIFI	All India Financial Institutions
AIILSG	All India Institute of Local Self Government
ASI	Annual Survey of Industries
BoP	Balance of Payments
CAG	Comptroller and Auditor General
CCIL	Clearing Corporation of India Ltd
CDS	Credit Default Swaps
CDSL	Central Depository Services (India) Ltd
CFC	Central Finance Commission
CFSS	Committee on Financial Sector Statistics
CGD	Centre for Good Governance
CIN	Corporate Identification Number
CSO	Central Statistics Office
DCBR	Department of Co-operative Banking Regulation
DCCB	District Central Co-operative Banks
DEPR	Department of Economic and Policy Research
DES	DIRECTORATE OF ECONOMICS AND STATISTICS
DGI	Data Gap Initiatives
DMA	DIRECTORATE OF MUNICIPAL ADMINISTRATION
DNBR	Department of Non-Banking Regulation
DNBS	Department of Non-Banking supervision
DSIM	Department of Statistics and Information Management
EPFO	Employees' Provident Fund Organisation
FC	Finance Commission
FCA	Foreign Currency Assets
FETERS	Foreign Exchange Transactions Electronic Reporting System

### **Abbreviations**

FIDD	Financial Inclusion and Development Department
FoF	Flow of Funds
FPO	Farmer Producer Organisation
FRA	Forward Rate Agreement
FSS	Financial Sector Statistics
GG	General Government
GIS	Geographic information system
GoI	Government of India
GP	Gram Panchayat
GPMS	Gram Panchayat Management System
GSDP	Gross State Domestic product
GVA	Gross Value Added
HFC	Housing Finance Company
HFCs-D	Deposit-taking Housing Finance Companies
HFCs-ND	Non Deposit-taking Housing Finance Companies
HLC	High Level Committee (HLC) on Estimation of Savings and Investment (2009)
IBRD	International Bank for Reconstruction and Development
IDA	International Development Association
IFC	International Finance Corporation
IIP	International Investment Position
IMF	International Monetary Fund
IRDA	Insurance Regulatory and Development Authority
IRS	Interest Rate Swap
LAB	Local Area Banks
LB	Local Bodies
LEI	Legal Entity Identifier
MCA	Ministry Of Corporate Affairs
MFI	Micro-Finance Institutions
MGNREGS	Mahatma Gandhi National Rural Employment Guarantee Scheme
MMFSC	Manual of Monetary and Financial Statistics Compilation
MMMF	Money Market Mutual Funds

### **Abbreviations**

MoPR	Ministry of Panchayati Raj
MOSPI	Ministry of Statistics and Programme Implementation
MP	Mandal Parishad
MSME	Micro, Small and Medium Enterprises
NAAD	National Accounts Analysis Division
NABARD	National Bank For Agriculture And Rural Development
NAFSCOB	National Federation of State Cooperative Banks
NB	Net Borrowing
NBFCs	Non-Banking Financial Companies
NBFCs-D	Deposit-taking Non-Banking Financial Companies
NBFCs-ND	Non Deposit-taking Non-banking Financial Companies
NBFCs-ND-SI	Systemically Important Non Deposit-taking Non-banking Financial Companies
NBS	National Balance Sheet
NFI	Net Financial Investment
NHB	National Housing Bank
NIC	National Industrial Classification
NL	Net Lending
NMMMF	Non-Money Market Mutual Funds
NPISHs	Non-Profit Institutions serving Households
NPS	National Pension System
NSC	National Statistical Commission
NSDL	National Securities Depository Ltd.
NVA	Net Value Added
OCVA	Other Changes in the Volume of Assets
ODC	Other Depository Corporations
OECD	Organization for Economic Cooperation and Development
OTC	Over-the-Counter
PACS	Primary Agricultural Credit Society
PCARDB	Primary Cooperative Agriculture and Rural Development Banks
PCB	Primary Co-operative Banks
PFRDA	Pension Fund Regulatory and Development Authority

### **Abbreviations**

PMAY	Prime Minister Awas Yojana
PRI	Panchayati Raj Institutions
PRIASoft	Panchayati Raj Institutions Accounting Software
PS	Panchayat Samiti
PUC	Paid-up Capital
RBI	Reserve Bank of India
RCS	Registrar of Cooperative Societies
RLB	Rural Local Body
RoI	Rest of India
RoW	Rest of the World
RTA	Registrars and Transfer Agents
SCARDB	State Cooperative Agriculture and Rural Development Bank
SCB	Scheduled Commercial Banks
SDDS	Special Data Dissemination Standard
SDR	Special Drawing Rights
SEBI	Securities and Exchange Board of India
SFC	State Finance Commission
SNA	System of National Accounts
SOA	Sequence of Accounts
StCB	State Co-operative Banks
UCB	Urban Co-operative banks
ULB	Urban Local Body
ULIP	Unit Linked Insurance Plan
WG	Working Group on Compilation of FoF Accounts of the Indian Economy (2015)
WUA	Water Users Association
ZP	Zilla Parishad

## **Chapter 1**

### **Background**

#### **Section I: Introduction**

1.1 The Sequence of Accounts (SOA) in the System of National Accounts (SNA) provides an integrated framework connecting production, capital accumulation and financial accounts, each of which present not only a summary of the respective accounts, but also linkages from one account to another. The saving-investment gap, the balancing entry in the capital accumulation account, is the connecting link to the financial accounts. The financial accounts permit identification of net borrowers and lenders, along with the size of the surplus or deficit at the sectoral level. The financial accounts further explain how net lending (NL) or net borrowing (NB) is effected by means of changes in holding of various credit instruments. However, details on who is financing whom and through which credit instrument cannot be identified at this level. Flow of Funds (FoF) accounts answer these questions by providing structure of the sources and the uses of funds of different sectors of the economy and the credit instruments by means of which inter-sectoral transfer of funds (from-whom-to-whom - --FWTW) takes place. When credit instruments are arranged according to the order of liquidity, and for each credit instrument, the suppliers and the receivers are identified, the net financial deficit of the deficit sectors as also their reliance on other sectors can be analysed. Similarly, the net surplus of the surplus sectors and their role in financing other sectors can also be studied. Thus, FoF accounts supplement financial counterpart in the SOA, and are compiled separately from the accounts of the institutions covered in each of the sectors.

1.2 FoF accounts serve many useful purposes. As FoF accounts track the flow of money to and from various sectors, they present a better view of the interconnectedness of various sectors and the extent of shock that may propagate from one sector of the economy to another. Transactions in various sub-sectors of the financial sector help in assessing the nature and pace of financial developments in the economy. These accounts show how the government finances its deficit or manages its surplus and acquires financial assets. Given the matrix of inter sectoral disposition of funds, it would be possible to work out the resources to be mobilised from various

sectors for a targeted level of investment. Alternatively, the feasible level of investment can be worked out for a given structure of saving and the matrix under reference. These exercises are expected to be useful in financial planning. The transactions of domestic sectors with the Rest of the World (RoW) sector as compiled in FoF accounts can be used to check consistency with corresponding parameters derived independently from the national accounts and the balance of payments (BoP). They also help in analysing the differential impact of monetary policies (e.g. rate change) on various sectors in the economy due to their choice of financial instruments.

1.3 The recent financial crisis (2008) highlighted several data gaps that needed to be filled-in for better assessing the evolution of the economy, one among them being sectoral coverage of national balance sheet and FoF data with data on non-bank financial institutions of particular importance. Also, it is envisaged under the G-20 Data Gap Initiatives (DGI) that maturity wise breakdown of instruments in FoF accounts would help in assessing maturity risk, sector specific issues in asset liability management, liquidity management and leverages being enjoyed by the institutional sectors. Further, information on nominal/ market values of debt securities with details on nonperforming loans would be useful in identifying the credit risk transfer among various sectors. While FoF accounts involve the aggregation of a large number of sectors with their detailed financial transactions, there remains issues of correct valuation of assets; and exclusion of non-reproducible real assets and human wealth.

1.4 In view of the numerous benefits from FoF accounts, most of the economies compile these accounts at quarterly/ annual frequencies. The FoF accounts for India owe their origin to a suggestion of Sir C.D. Deshmukh, the then Union Finance Minister, in 1955. In 1956, the Central Statistics Office (CSO) initiated preparatory work along with the Reserve Bank of India (RBI). Based on the pilot exercise undertaken by Professor H. W. Arndt of the University of Australia in 1959 in a memorandum entitled "Financial Flows in the Indian Economy 1951-52 – 1957-58", the CSO and the RBI appointed a Working Group on Flow of Funds (Chairman: Shri P. C. Mathew) to formulate proposals for further work in this direction. The Mathew Working Group suggested a model set of accounts to be adopted and presented a consolidated FoF accounts of India for the year 1957-58. Subsequently, the RBI developed the work further and published the detailed FoF accounts in December 1964 starting covering data from 1951-52 onwards.

1.5 Over the period, significant improvements have been brought about in the methodology and coverage in line with international standards, particularly the SNA. These revisions are well chronicled in the Report of the Working Group (WG) on the compilation of FoF accounts for the Indian Economy (2015). The latest article on FoF accounts for the Indian Economy for 2015-16 was released in August 2017 along with detailed statements. The data in the present series (incorporating realignments in economic sectors as per recommendations of the WG) starts from the year 2011-12, and as such, it will not be strictly comparable with the data prior to 2011-12.

1.6 With recent emphasis on linking macro data with the underlying micro statistics to improve its quality, there was a need to review the system for generating disaggregate data to the extent possible and building the aggregates consistent with the same. With this background, the National Statistical Commission (NSC), Ministry of Statistics and Programme Implementation (MOSPI), Government of India *vide* order dated October 5, 2016 constituted a professional Committee<sup>1</sup> on Financial Sector Statistics (CFSS), under the Chairmanship of Prof. Ravindra H. Dholakia, Indian Institute of Management, Ahmedabad with membership of renowned academicians/ researchers in the field and the institutions involved in supplying data (List of members in Annex 1.1). The Department of Statistics and Information Management (DSIM), RBI provided secretarial support to the Committee.

1.7 The terms of reference of the Committee were:

- i) To review the existing system for collection, processing of FoF statistics with a view to suggest measures for an integrated system capturing granular data;
- ii) To explore possibility and suggest appropriate method and mechanism for providing the estimates at the State level;

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<sup>1</sup> In all, five professional Committees were constituted to cover the requirement of statistics for estimation of National Accounts Statistics as per SNA 2008 and look into issues of data governance, data integrity and audit trails of a National Statistical System.

- iii) To recommend suitable measures to strengthen system and process for collection, collation and dissemination of these statistics with possibility for improving timelines;
- iv) To take stock of the existing Information Technology deployment for collection of granular data from primary sources and recommend suitable measures to establish/revamp system for (1) processing and (2) periodic audit through deep drive for integrated system;
- v) To examine present system for dissemination of data and recommend measures for improvement consistent with international standard.

1.8 The chapter is organised into five sections. The next section discusses the sectors and instruments covered under the FoF accounts of India. Approach of the Committee along with briefs on the proceedings of the Committee are given in Section III. Section IV delineates the present position of compilation of FoF accounts in other countries, with special reference to the G-20 DGI. Section V gives an outline of the Report.

## **Section II: Sectors and Instruments Covered in India's Flow of Funds Accounts**

1.9 At present (the latest revision effective from 2011-12), the major sectors and instrument-wise classification; and the associated nomenclature in compilation and dissemination of India's FoF accounts are broadly in alignment with SNA 2008.

### **II.1 Institutional Sectors**

1.10 India's FoF accounts comprises five broad institutional sectors, namely (i) financial corporations; (ii) non-financial corporations both in public<sup>2</sup> and private<sup>3</sup> sectors; (iii) general government (GG) - the Central as well as State governments; (iv) household (HH) sector; and (v) RoW. The household sector includes Non-Profit Institutions serving Households (NPISHs) as separating the data is problematic. Constituents of each of these sectors are detailed below.

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<sup>2</sup> Public non-financial corporations cover central public sector non-departmental non-financial enterprises, state power utilities and port trusts. Other State PSUs are not included.

<sup>3</sup> Private non-financial corporations refer to both public and private limited non-financial companies.

## **II.1.1 Financial Corporations**

1.11 Financial corporations have been split into following institutional units:

- a) *Central Bank* – the Reserve Bank of India (RBI),
- b) *Other depository corporations (ODC)* which comprises: (i) scheduled commercial banks (SCBs), (ii) non-scheduled commercial banks [e.g., the Local Area Banks (LAB)], (iii) co-operative banks and other co-operative institutions - this sub-sector includes State Co-operative Banks (StCBs), District Central Co-operative Banks (DCCBs), Primary / Urban Co-operative banks (PCBs/UCBs), Primary Agriculture Credit Societies (PACS), State Co-operative Agriculture and Rural Development Banks (SCARDBs), Primary Co-operative Agriculture and Rural Development Banks (PCARDBS) and Industrial Co-operative Banks (state / central), (iv) deposit-taking non-banking financial companies (NBFCs-D); this sub-sector includes all deposit-taking NBFCs registered with the Department of Non-banking Regulation (DNBR) in the RBI and (v) deposit-taking housing finance companies (HFCs-D); this sub-sector includes all deposit taking HFCs registered with the National Housing Bank (NHB).
- c) *Mutual Funds* - this sub-sector includes the mutual funds registered with the Securities and Exchange Board of India (SEBI).
- d) *Other financial intermediaries, except insurance corporations and pension & provident funds* – this comprises non-deposit taking NBFCs (NBFC-ND) and non-deposit taking HFCs (HFCs-ND)
- e) *All India Financial Institutions (AIFIs)* – National Bank for Agriculture and Rural Development (NABARD), NHB, EXIM Bank and Small Industries Development Bank of India (SIDBI).
- f) *Insurance corporations – both life and non-life insurance companies*
- g) *Provident / Pension funds* - this sub-sector covers (i) the employees' provident fund of the non-government and certain semi-government organisations whose accounts are not reflected in the budgets of central and state governments, (ii) the

contributory pension funds; (iii) the National Pension System (NPS), and (iv) the deposit-linked insurance funds maintained by certain trusts of provident funds.

### **II.1.2 Non-Financial Corporations**

1.12 Non-financial corporations have been split into five broad institutional units; *i) Non-Government non-financial companies* - this sub-sector comprises all public and private limited companies registered in India under the Indian Companies Act, 2013 (and the erstwhile Indian Companies Act, 1956) and branches of foreign companies operating in India, *ii) State Power Utilities and State Electricity Boards*; *iii) Co-operative non-credit societies*, *iv) Government owned Port Trusts, and v) Government Non-departmental non-financial undertakings (Public non-financial corporations)*.

### **II.1.3 General Government (GG)**

1.13 General government has been bifurcated into flowing institutional units;

- a) *Central government*
- b) *State Governments and Union Territories*

At present, Local Governments' (rural and urban Local Bodies (LBs)) data are not separately included in India's FoF accounts.

### **II.1.4 Rest of the World (RoW)**

1.14 The domestic sectors have transactions with foreign governments, foreign central banks, foreign commercial banks, non-bank financial institutions, various international agencies and institutions like International Monetary Fund (IMF), International Bank for Reconstruction and Development (IBRD), International Development Association (IDA), Asian Development Bank (ADB), International Finance Corporation (IFC), foreign non-financial corporations and non-resident individuals. All transactions of the domestic sectors with foreign units that are effected through the medium of money and credit are recorded in the accounts of the RoW. The FoF accounts of the RoW are derived from the BoP statistics, external debt statistics and international investment position of the Indian economy.

### **II.1.5 Household and Non-profit Institutions Serving Households (NPISH)**

1.15 The household sector comprises all individuals, non-government non-corporate enterprises of farm business and non-farm business, like, sole proprietorships and partnerships, and non-profit institutions. Household sector is conceptually a residual sector. However, during compilation, information on various instruments for this sector are collated separately, and not derived as residual. In FoF accounts being compiled by RBI, the household sector figures are obtained either from counterparty's accounts, or are estimated from results of surveys conducted by various statistical agencies. While preparing FWTW tables, an additional 'other sector' is introduced to account for the residuals (which cannot be allocated to any of the five institutional sectors).

### **II.2 Instruments Covered**

1.16 Financial instruments covered in the Indian FoF accounts follows the framework of SNA 2008 and include (i) monetary gold and special drawing rights (SDRs), (ii) currency and deposits, (iii) debt securities, (iv) loans and borrowings, (v) equity and investment funds (such as mutual funds), (vi) insurance, pension and provident funds, (vii) other accounts (including trade debt) and (viii) other liabilities/ assets and items not elsewhere classified (NEC), if any. Further disaggregates are shown wherever required.

## **Section III: Approach of the Committee and Brief Proceedings**

1.17 The Committee held periodic meetings to carry out the task assigned to it. The Committee noted that the High Level Committee (HLC) on Estimation of Savings and Investment, 2009 (Chairman: Dr. C. Rangarajan) and more recently, the WG suggested numerous changes in light of the developments in the financial sector and international best practices. Thus, in ***the first meeting*** of the Committee held on February 15, 2017 at RBI, Ahmedabad, the Chairman suggested that the Committee may look into the reasons for incomplete implementation of recommendations of the above reports and suggest a way forward. Dr. R.B. Barman, Chairman, NSC who attended the first meeting as a special invitee mentioned that the main distinguishing feature of the present Committees would be to build a bottom-up system of consistent macro aggregates and suggest use of integrated Data Warehouse Networks to

facilitate the process of collection, collation and dissemination of data. Thereafter, members from the RBI and the CSO briefed to the Committee members about:

- a) existing methodology for compilation of Flow of Funds Accounts of the Indian Economy,
  - b) SOA as envisaged in the SNA 2008 and
  - c) methodology for computing estimates of output and GVA of the financial corporations in the National Accounts Statistics (NAS).
- 1.18 Finally, in that meeting three sub-groups were formed by the Chairman:

- a. **Sub-group on Compilation of Regional Accounts** - The group was entrusted with the task of identifying data gaps in preparation of state-wise FoF accounts and suggest measures to resolve the issues. The members of the sub-group included Prof. Deepak Sethia (Co-ordinator), Prof. N.R. Bhanumurthy and representative from RBI.
- b. **Sub-group on Existing Issues in Compilation of FoF and Possible Solutions for Fixing these Problems** - The sub-group was required to identify weaknesses in the current compilation methodology and recommend steps to overcome them. The sub-group was also advised to study cross-country practices regarding compilation of quarterly FoF and suggest ways to implement the same in India. This sub-group consisted of members from the Department of Economic and Policy Research (DEPR) of RBI (co-ordinator), CSO, NABARD, Insurance Regulatory and Development Authority (IRDA) of India, Ministry of Corporate Affairs (MCA) and SEBI.
- c. **Sub-group on Government sector – Data on Local Governments** - This sub-group had the remit to focus on filling data gaps in the Government sector, with special reference to local Governments. The sub-group was expected to sort out the issues in collecting required data from this sub-sector. The members of this subgroup included Prof. N.R. Bhanumurthy (co-ordinator), Prof. Deepak Sethia, representatives of the CSO and the Ministry of Finance (MoF).

1.19 **The second meeting** of the Committee was held on May 20, 2017 at the RBI, Mumbai. In the meeting, co-ordinators of the respective sub-groups made

presentations on some aspects relating to their work area. An approach for estimating FoF at the State level was presented highlighting limitations in the existing data. Implementation status of recommendations of the WG was discussed for possible way ahead. As regards the data of rural local bodies (RLBs), it was brought out that there is no uniform system in maintaining their accounts and availability of staff is the biggest constraint. Also, the Committee was apprised of internationally agreed template for compilation and dissemination of FoF data as part of the G20 DGI. The Committee considered the issue of mismatches in FoF estimates of the RBI and stock positions as reflected from sequence of accounts compiled by the CSO.

1.20 **The third meeting** of the Committee was held on September 29, 2017 at RBI, Mumbai. Officials from the All India Institute of Local Self Government (AIILSG), Pension Fund Regulatory and Development Authority (PFRDA) and Mutual Funds Division of SEBI attended the meeting as special invitees. AIILSG officials pointed out that annual accounts data of the urban local bodies (ULBs) are not available uniformly but they may be submitting select key accounting data to the respective central authority in the State. Further, the Committee considered the status of data collection on LBs and suggested that the CSO and the RBI may prepare a common template for data collection for their combined requirement of compilation of National Accounts and the FoF. The Committee also discussed ways of improving the availability and timeliness of data for compilation of FoF accounts of India. The sub-group on formation of regional accounts presented finer details of their approach paper on estimation of FoF at the State level.

1.21 **The final meeting** of the Committee held on March 26, 2018 discussed the draft report thoroughly and finalised its recommendations.

#### **Section IV: International Position on Compilation of FoF Accounts**

1.22 While the framework of the SNA has been largely implemented in most of the advanced economies, its adoption has remained partial in the emerging economies (see the Report of the WG for more details). Financial crisis of 2008 underscored the need to focus on the inter-linkages among various sectors of an economy and between them and their counterparts in the rest of the world. In this regard, preparation of FoF from one economic sector to another through each of the suggested instruments

gained importance. Recognising this, the G-20 DGI suggested preparation of financial stocks and flows, sector-wise and instrument-wise, at quarterly and annual frequencies. It has also prescribed the coverage of the sectors and the instruments in FoF accounts in two parts, namely, target and encouraged (see details of sectors in Annex 1.2 and instruments in Annex 1.3). G-20 member countries are required to provide data for all target sectors on all target instruments.

1.23 A survey conducted by the Organisation for Economic Co-operation and Development (OECD) for G-20 countries and its key accession partners on availability of data on major instruments for all major sectors in the economy revealed that majority of the countries have at least partial annual and quarterly FWTW data (Annex 1.4). Data on loans and ‘currency and deposits’ are available for most of the economies and compilation of FoF at annual frequency is most common. The survey revealed that 13 European Economic Area countries (viz., Austria, Czech Republic, Estonia, Finland, Greece, Hungary, Ireland, Italy, Lithuania, Norway, Slovak Republic, Slovenia, Spain and Sweden) have FWTW data in respect of all the major eight instruments at quarterly as well as at annual frequencies. Australia was the only non-European country, which was having information on all the major instruments at quarterly as well as at annual frequencies. Costa Rica and Israel were having the information at annual frequency, but not at quarterly frequency. Countries ranging from Belgium, Canada, New Zealand, Switzerland and UK to Colombia, Brazil and Indonesia reported complete absence of FWTW information. Other countries (such as France and USA) were having annual/ quarterly FWTW information only for some instruments. In short, FWTW data availability varies substantially across countries - even among the group of mature developed economies – and much progress needs to be made.

1.24 Based on the availability of information, the OECD prepared a number of formats and discussed these with G-20 participating countries to arrive at a consensus. As per the present status of discussions, a common format arrived at is given in Annex 1.5. It is decided that to start with FWTW information may be captured only for major economic sectors [viz.: (a) Total economy (S1), (b) non-financial corporations (S11), (c) financial corporations (S12), (d) General Government (S13),  
(e) Households and NPISHs (S14\_S15), and (f) Rest of the World (S2)]. The

instruments on which information is to be collected for these sectors are grouped into Tier 1 (targeted/ minimum - included in the template) and Tier 2 (encouraged - inclusion in the template under consideration). The G-20 countries are required to submit these information by 2021.

1.25 A comparison of target (Tier 1) instruments being recommended by the G-20 DGI with the present data disseminated by India indicates that it is not disseminating information on (a) bifurcation of loans as well as debt securities into long- and short-term, (b) listed shares and (c) financial derivatives. Further, the prescribed template also aims to have information on eligible instruments separately in domestic and foreign currencies. The Committee felt that the above shortcoming may be bridged quickly so that India can comply with the international standard.

## **Section V. Organisation of the Report**

1.26 The report is organised into six chapters. Chapter II reviews the implementation status of the recommendations made by HLC and the WG. Chapter III on 'Current Issues in Compilation of the FoF Accounts of the Indian Economy' lists out the data sources, issues in the FoF compilation, important data/ methodological gaps, reasons for differences in the CSO and the RBI data and their possible reconciliation. Chapter IV discusses availability of data on local self-government and provides the Committee's suggestions regarding collection of data from rural/ urban LBs for inclusion in the national accounts and the FoF. Feasibility of compiling the FoF accounts at the State level is explored in Chapter-V. Finally, the recommendations of the Committee are summarised and consolidated in Chapter VI.

**Annex 1.1: Committee on Financial Sector Statistics - List of Members**

S. No	Name	Designation	Organisation	Member
1	Prof Ravindra H. Dholakia	Professor	IIMA	Chairman
2	Dr Goutam Chatterjee	Principal Adviser, RBI	DSIM, RBI	Member Secretary
3	Shri K.G.K. Subba Rao	Former Adviser, DSIM, RBI		Non-Official Member
4	Prof. N.R. Bhanumurthy	Professor	NIPF&P	Non-Official Member
5	Prof. Deepak Sethia	Professor	IIMI	Non-Official Member
6	Prof Jayanth R. Varma	Professor	IIMA	Non-Official Member
7	Smt. T. Rajeswari	DDG	CSO	Member
8	Sh. G.S. Chawla	Executive Director (IT/SD)	LIC	Member
9	Dr. Sarat Kumar Malik	CGM	SEBI	Member
10	Ms. Geeta Singh Rathore	DDG	MCA, Delhi	Member
11	Smt. Anupam Prakash	Director	DEPR, RBI	Member
12	Dr. Y.K. Gupta	Director	DSIM, RBI	Member
13	Ms. Anindita Sinharay	Director	MOF	Member
14	Dr. Amitava Saha	Director	DGCI&S	Member
15	Shri R.K. Sharma	GM	IRDA	Member
16	Dr. K.J.S. Satyasai	GM	NABARD	Member

**Annex 1.2: Target and Encouraged Sectors for Dissemination of Financial Accounts Data**

	= Target	= Encouraged		
<b>Measure:</b> Current prices; Quarterly data non-seasonally adjusted.				
<b>Consolidation:</b> non-consolidated data for all sectors + consolidated data as a target for S13 only (and on an encouraged basis for all other sectors)				
	Sectors	Sector Code	Quarterly	Annual
	<b>Timeliness</b>		T+ 4	T+ 9
Total Economy	Total	S1		
Non-financial corporations	Total		S11	
	Domestically controlled non-financial corporations	Total	S1100	
		Total	S11001	
		Of which: Public non-financial corporations, which are part of domestic multinationals	S110011	
	Private, national non-financial corporations	Total	S11002	
		Of which: National private non-financial corporations, which are part of domestic multinationals	S110021	
		Total	S11003	
	Total		S12	
	Monetary financial institutions	Total	S121+S122+S123	
		Central bank	S121	
		Other deposit-taking corporations	S122	
		Money market funds	S123	
Financial corporations	Other financial corporations	Total	S124+S125+S126+S127	
		Non-MMF investment funds	S124	
		Other financial Intermediaries except Insurance corporations and pension funds	S125	
		Financial Auxiliaries	S126	
		Captive financial institutions and money lenders	S127	
	Insurance corp. and pension funds	Total	S128+S129	
		Insurance corporations	S128	
		Pension funds	S129	

*Continued...*

**Annex 1.2: Target and Encouraged Sectors for Dissemination of Financial Accounts Data**

	= Target	= Encouraged		
<b>Measure:</b> Current prices; Quarterly data non-seasonally adjusted.				
<b>Consolidation:</b> non-consolidated data for all sectors + consolidated data as a target for S13 only (and on an encouraged basis for all other sectors)				
	Sectors	Sector Code	Quarterly	Annual
	<b>Timeliness</b>		T+ 4	T+ 9
Domestically controlled financial corporations	Public financial corporations	Total	S12DO	
		Total	S12001	
		Of which: Public financial corporations which are part of domestic multinationals		
			S120011	
		Total	S12002	
	Private national financial corporations	Of which: National private financial corporations which are part of domestic multinationals		
			S120021	
	Foreign-controlled financial corporations	Total	S12003	
General government	Total		S13	
	Of which: Social Security Funds		S1314	
Households and NPISHs	Total		S14+S15	
	Households		S14	
	NPISHs		S15	
Rest of the World	Total		S2	

**Annex 1.3: Target and Encouraged Instruments for Dissemination of Financial Accounts**

Targets	Encouraged	
Instruments	Quarterly	Annual
F1 Monetary gold and SDRs		
F11 Monetary gold		
F12 SDRs		
F2 Currency and deposits		
Of which: Domestic currency		
F21 Currency		
F22 Transferable deposits		
F221 Interbank positions		
F229 Other transferable deposits		
F29 Other deposits		
F3 Debt securities		
Of which: Domestic currency		
F31 Short-term		
F32 Long-term		
With remaining maturity of one year and less		
With remaining maturity of more than a year		
F4 Loans		
Of which: Domestic currency		
F41 Short-term		
F42 Long-term		
With remaining maturity of one year and less		
With remaining maturity of more than a year		
F5 Equity and investment fund shares		
F51 Equity		
F511 Listed shares		
F512 Unlisted shares		
F519 Other equity		
F52 Investment fund shares/units		
F521 Money market fund shares/units		
F522 Non MMF investment fund shares/units		
F6 Insurance, pension and standardized guarantee schemes		
F61 Non-life insurance technical reserves		
F62 Life insurance and annuity entitlements		
F63+F64+F65 Retirement entitlements		
F63 Pension entitlements		
F64 Claim of pension fund on pension managers		
F65 Entitlements to non-pension benefits		
F66 Provisions for calls under standardized guarantees		
F7 Financial derivatives and employee stock options		
F71 Financial derivatives		
F711 Options		
F712 Forwards		
F72 Employee stock options		
F8 Other accounts receivable/payable		
Of which: Domestic currency		
F81 Trade credits and advances		
F89 Other accounts receivable/payable		

**Annex 1.4: Availability of Data on Major Instruments for all Major Sectors of the Economy**

Country	Annual	Quarterly
<b>Developed Countries/ Advances Economies</b>		
Australia	F1 to F8	F1 to F8
Austria	F1 to F8	F1 to F8
Belgium	No	No
Canada	No	No
Chile	F2 & F4	F2 & F4
Czech Republic	F1 to F8	F1 to F8
Denmark	F1 to F8	F1 to F8
Estonia	F1 to F8	F1 to F8
Finland	F1 to F8	F1 to F8
France	F1; F2; F4 & F8	F1; F2; F4 & F8
Germany	F2; F3; F4; F511; F52	F2; F3; F4; F511; F52
Greece	F1 to F8	F1 to F8
Hungary	F1 to F8	F1 to F8
Iceland	F2; F3; F4; F51; F52; F7; F8	No
Ireland	F1 to F8	F1 to F8
Israel	F1 to F8	No
Italy	F1 to F8	F1 to F8
Japan	F3; F4	F3; F4
Netherlands	F2; F3; F4:F51; F52; F6	F2; F3; F4:F51; F52; F6
New Zealand	No	No
Norway	F1 to F8	F1 to F8
Poland	F1; F2; F4; F6	F1; F2; F4; F6
Portugal	F3	F3
Slovak Republic	F1 to F8	F1 to F8
Slovenia	F1 to F8	F1 to F8
Spain	F1 to F8	F1 to F8
Sweden	F1 to F8	F1 to F8
Switzerland	NO	NO
United Kingdom	NO	NO
United State	F2; F4; F52; F6	F2; F4; F52; F6
Latvia	F2; F3; F4; F51; F52; F6	F2; F3; F4; F511; F52
Lithuania	F1 to F8	F1 to F8
Colombia	NO	NO
Costa Rica	F1 to F8	NO
<b>Developing Countries/ Emerging Market Economies</b>		
Russia	F2; F3; F4; F5; F6; F8	NO
Brazil	No	No
Indonesia	No	No
Mexico	F2; F3; F4; F51; F52; F6	No
Turkey	F2; F4	F2; F4

**Annex 1.5: Sectors and Instruments for Collecting FWTW Information –  
Quarterly and Annual (Stocks and Flows) (Measure: Current Prices)**  
**(Consolidation:** Non-consolidated data for all sectors)  
**(Liabilities:** In columns; **Assets:** In rows)

<b>Sectors</b>	Target (or, Minimum) (Or Tier 1)		Encouraged (Or Tier 2)
	<b>Instruments</b>		
Total Economy (S1)	<b>F Total Assets/ Liabilities</b>		
Non-financial corporations (S11)	F1 Monetary gold and SDRs		
Financial corporations (S12)	F2 Currency and deposits		
General government (S13)	F21 Currency		
Households and NPISHs (S14+S15)	F22_29 Deposits		
Rest of the World (S2)	F3 Debt securities		
	F31 Short-term		
	F32 Long-term		
	F4 Loans		
	F41 Short-term		
	F42 Long-term		
	F5 Equity and investment fund shares		
	F51 Equity		
	F511 Listed shares		
	F512+F519 Unlisted shares and Other equity		
	F52 Investment fund shares/units		
	F6 Insurance, pension and standardized guarantee schemes		
	F61 Non-life insurance technical reserves		
	F62 Life insurance and annuity entitlements		
	F63 Pension entitlements		
	F64 Claim of pension fund on pension managers		
	F65 Entitlements to non-pension benefits		
	F66 Provisions for calls under standardized guarantees		
	F7 Financial derivatives and employee stock options		
	F71 Financial derivatives		
	F72 Employee stock options		
	F8 Other accounts receivable/payable		
	F81 Trade credits and advances		
	F89 Other accounts receivable/payable		

Note: 1) Information is required for each of the above sectors/ instruments as per target (or minimum)/ encouraged.  
2) As of now, data on red inked instruments is not being shown separately in India's FoF accounts due to unavailability of information at desired granularity.

**Annex 1.6: Detailed Template for Collecting FWTW Information –  
QUARTERLY & ANNUAL data: Sectors and Instruments (stocks and flows)**

Measure: current prices Not-applicable		Consolidation: Non-consolidated data for all sectors Tier 1      Tier 2; inclusion in the template under consideration					
Instrument/ proposed sector levels	Assets of:	Liabilities of:					
		Total economy (S1)					Rest of world (S2)
		Total (S1)	Non-financial corporations (S11)	Financial corporations (S12)	General governm ent (S13)	Households and NPISHs (S14_S15)	
F - Total assets/liabilities	S1						
F1 - Monetary gold and SDRs	S1						
F2 - Currency and deposits	S1						
F21 - Currency	S1						
F22_F29 - Deposits	S1						
F3 - Debt securities	S1						
F31 - Debt securities, short-term	S1						
F32 - Debt securities, long-term	S1						
F4 - Loans	S1						
F41 - Loans, short-term	S1						
F42 - Loans, long-term	S1						
F5 - Equity and investment funds shares	S1						
F51 - Equity	S1						
F511 - Listed shares	S1						
F512+F519 - Unlisted shares and other equity	S1						
F52 - Investment funds shares or units	S1						
F6 - Insurance, pension and standardized guarantee schemes	S1						
F61 - Non-life insurance technical reserves	S1						

*Continued ...*

**Annex 1.6: Detailed Template for Collecting FWTW Information –  
QUARTERLY & ANNUAL data: Sectors and Instruments (stocks and flows)**

Measure: current prices Not-applicable	Consolidation: Non-consolidated data for all sectors Tier 1	Tier 2; inclusion in the template under consideration					
Instrument/ proposed sector levels	Assets of:	Liabilities of:					
		Total economy (S1)					
		Total (S1)	Non-financial corporations (S11)	Financial corporations (S12)	General governm ent (S13)	Households and NPISHs (S14_S15)	Rest of world (S2)
F62 - Life insurance and annuity entitlements	S1						
F63 - Pension entitlements	S1						
F64 - Claim of pension funds on pension managers	S1						
F65 - Entitlements to non-pension benefits	S1						
F66 - Provisions for calls under standardised guarantees	S1						
F7 - Financial derivatives and employee stock options	S1						
F71 - Financial derivatives	S1						
F72 - Employee stock options	S1						
F8 - Other accounts receivable/payable	S1						
F81 - Trade credits	S1						
F89 - Other accounts receivable/payable excluding trade credits	S1						
F - Total assets/liabilities	S11						
F1 - Monetary gold and SDRs	S11						
F2 - Currency and deposits	S11						
F21 - Currency	S11						
F22_F29 - Deposits	S11						

*Continued ...*

**Annex 1.6: Detailed Template for Collecting FWTW Information –  
QUARTERLY & ANNUAL data: Sectors and Instruments (stocks and flows)**

Measure: current prices Not-applicable		Consolidation: Non-consolidated data for all sectors Tier 1      Tier 2; inclusion in the template under consideration					
Instrument/ proposed sector levels	Assets of:	Liabilities of:					
		Total economy (S1)					Rest of world (S2)
		Total (S1)	Non-financial corporations (S11)	Financial corporations (S12)	General governm ent (S13)	Households and NPIHSs (S14_S15)	
F3 - Debt securities	S11						
F31 - Debt securities, short-term	S11						
F32 - Debt securities, long-term	S11						
F4 - Loans	S11						
F41 - Loans, short-term	S11						
F42 - Loans, long-term	S11						
F5 - Equity and investment funds shares	S11						
F51 - Equity	S11						
F511 - Listed shares	S11						
F512+F519 - Unlisted shares and other equity	S11						
F52 - Investment funds shares or units	S11						
F6 - Insurance, pension and standardized guarantee schemes	S11						
F61 - Non-life insurance technical reserves	S11						
F62 - Life insurance and annuity entitlements	S11						
F63 - Pension entitlements	S11						
F64 - Claim of pension funds on pension managers	S11						

*Continued ...*

**Annex 1.6: Detailed Template for Collecting FWTW Information –  
QUARTERLY & ANNUAL data: Sectors and Instruments (stocks and flows)**

Measure: current prices Not-applicable		Consolidation: Non-consolidated data for all sectors Tier 1      Tier 2; inclusion in the template under consideration					
Instrument/ proposed sector levels	Assets of:	Liabilities of:					
		Total economy (\$1)					Rest of world (S2)
		Total (S1)	Non-financial corporations (S11)	Financial corporations (S12)	General governm ent (S13)	Households and NPISHs (S14_S15)	
F65 - Entitlements to non-pension benefits	S11						
F66 - Provisions for calls under standardised guarantees	S11						
F7 - Financial derivatives and employee stock options	S11						
F71 - Financial derivatives	S11						
F72 - Employee stock options	S11						
F8 - Other accounts receivable/payable	S11						
F81 - Trade credits	S11						
F89 - Other accounts receivable/payable excluding trade credits	S11						
F - Total assets/liabilities	S12						
F1 - Monetary gold and SDRs	S12						
F2 - Currency and deposits	S12						
F21 - Currency	S12						
F22_F29 - Deposits	S12						
F3 - Debt securities	S12						
F31 - Debt securities, short-term	S12						
F32 - Debt securities, long-term	S12						

*Continued ...*

**Annex 1.6: Detailed Template for Collecting FWTW Information –  
QUARTERLY & ANNUAL data: Sectors and Instruments (stocks and flows)**

Measure: current prices Not-applicable		Consolidation: Non-consolidated data for all sectors Tier 1      Tier 2; inclusion in the template under consideration					
Instrument/ proposed sector levels	Assets of:	Liabilities of:					
		Total economy (\$1)					Rest of world (S2)
		Total (S1)	Non-financial corporations (S11)	Financial corporations (S12)	General governm ent (S13)	Households and NPISHs (S14_S15)	
F4 - Loans	S12						
F41 - Loans, short-term	S12						
F42 - Loans, long-term	S12						
F5 - Equity and investment funds shares	S12						
F51 - Equity	S12						
F511 - Listed shares	S12						
F512+F519 - Unlisted shares and other equity	S12						
F52 - Investment funds shares or units	S12						
F6 - Insurance, pension and standardized guarantee schemes	S12						
F61 - Non-life insurance technical reserves	S12						
F62 - Life insurance and annuity entitlements	S12						
F63 - Pension entitlements	S12						
F64 - Claim of pension funds on pension managers	S12						
F65 - Entitlements to non-pension benefits	S12						
F66 - Provisions for calls under standardised guarantees	S12						

*Continued ...*

**Annex 1.6: Detailed Template for Collecting FWTW Information –  
QUARTERLY & ANNUAL data: Sectors and Instruments (stocks and flows)**

Measure: current prices Not-applicable		Consolidation: Non-consolidated data for all sectors Tier 1      Tier 2; inclusion in the template under consideration					
Instrument/ proposed sector levels	Assets of:	Liabilities of:					
		Total economy (S1)					
		Total (S1)	Non-financial corporations (S11)	Financial corporations (S12)	General governm ent (S13)	Households and NPISHs (S14_S15)	Rest of world (S2)
F7 - Financial derivatives and employee stock options	S12						
F71 - Financial derivatives	S12						
F72 - Employee stock options	S12						
F8 - Other accounts receivable/payable	S12						
F81 - Trade credits	S12						
F89 - Other accounts receivable/payable excluding trade credits	S12						
F - Total assets/liabilities	S13						
F1 - Monetary gold and SDRs	S13						
F2 - Currency and deposits	S13						
F21 - Currency	S13						
F22_F29 - Deposits	S13						
F3 - Debt securities	S13						
F31 - Debt securities, short-term	S13						
F32 - Debt securities, long-term	S13						
F4 - Loans	S13						
F41 - Loans, short-term	S13						
F42 - Loans, long-term	S13						
F5 - Equity and investment funds shares	S13						

*Continued ...*

**Annex 1.6: Detailed Template for Collecting FWTW Information –  
QUARTERLY & ANNUAL data: Sectors and Instruments (stocks and flows)**

Measure: current prices Not-applicable		Consolidation: Non-consolidated data for all sectors Tier 1      Tier 2; inclusion in the template under consideration					
Instrument/ proposed sector levels	Assets of:	Liabilities of:					
		Total economy (S1)					Rest of world (S2)
		Total (S1)	Non-financial corporations (S11)	Financial corporations (S12)	General governm ent (S13)	Households and NPISHs (S14_S15)	
F51 - Equity	S13						
F511 - Listed shares	S13						
F512+F519 - Unlisted shares and other equity	S13						
F52 - Investment funds shares or units	S13						
F6 - Insurance, pension and standardized guarantee schemes	S13						
F61 - Non-life insurance technical reserves	S13						
F62 - Life insurance and annuity entitlements	S13						
F63 - Pension entitlements	S13						
F64 - Claim of pension funds on pension managers	S13						
F65 - Entitlements to non-pension benefits	S13						
F66 - Provisions for calls under standardised guarantees	S13						
F7 - Financial derivatives and employee stock options	S13						
F71 - Financial derivatives	S13						
F72 - Employee stock options	S13						

*Continued ...*

**Annex 1.6: Detailed Template for Collecting FWTW Information –  
QUARTERLY & ANNUAL data: Sectors and Instruments (stocks and flows)**

Measure: current prices Not-applicable		Consolidation: Non-consolidated data for all sectors Tier 1      Tier 2; inclusion in the template under consideration					
Instrument/ proposed sector levels	Assets of:	Liabilities of:					
		Total economy (S1)					Rest of world (S2)
		Total (S1)	Non-financial corporations (S11)	Financial corporations (S12)	General governm ent (S13)	Households and NPISHs (S14_S15)	
F8 - Other accounts receivable/payable	S13						
F81 - Trade credits	S13						
F89 - Other accounts receivable/payable excluding trade credits	S13						
F - Total assets/liabilities	S14_S15						
F1 - Monetary gold and SDRs	S14_S15						
F2 - Currency and deposits	S14_S15						
F21 - Currency	S14_S15						
F22_F29 - Deposits	S14_S15						
F3 - Debt securities	S14_S15						
F31 - Debt securities, short-term	S14_S15						
F32 - Debt securities, long-term	S14_S15						
F4 - Loans	S14_S15						
F41 - Loans, short-term	S14_S15						
F42 - Loans, long-term	S14_S15						
F5 - Equity and investment funds shares	S14_S15						
F51 - Equity	S14_S15						
F511 - Listed shares	S14_S15						
F512+F519 - Unlisted shares and other equity	S14_S15						

*Continued ...*

**Annex 1.6: Detailed Template for Collecting FWTW Information –  
QUARTERLY & ANNUAL data: Sectors and Instruments (stocks and flows)**

Measure: current prices Not-applicable		Consolidation: Non-consolidated data for all sectors Tier 1      Tier 2; inclusion in the template under consideration					
Instrument/ proposed sector levels	Assets of:	Liabilities of:					
		Total economy (\$1)					Rest of world (S2)
		Total (\$1)	Non-financial corporations (S11)	Financial corporations (S12)	General governm ent (S13)	Households and NPISHs (S14_S15)	
F52 - Investment funds shares or units	S14_S15						
F6 - Insurance, pension and standardized guarantee schemes	S14_S15						
F61 - Non-life insurance technical reserves	S14_S15						
F62 - Life insurance and annuity entitlements	S14_S15						
F63 - Pension entitlements	S14_S15						
F64 - Claim of pension funds on pension managers	S14_S15						
F65 - Entitlements to non-pension benefits	S14_S15						
F66 - Provisions for calls under standardised guarantees	S14_S15						
F7 - Financial derivatives and employee stock options	S14_S15						
F71 - Financial derivatives	S14_S15						
F72 - Employee stock options	S14_S15						
F8 - Other accounts receivable/payable	S14_S15						
F81 - Trade credits	S14_S15						

*Continued ...*

**Annex 1.6: Detailed Template for Collecting FWTW Information –  
QUARTERLY & ANNUAL data: Sectors and Instruments (stocks and flows)**

Measure: current prices Not-applicable	Consolidation: Non-consolidated data for all sectors Tier 1	Tier 2; inclusion in the template under consideration					
Instrument/ proposed sector levels	Assets of:	Liabilities of:					
		Total economy (\$1)					
		Total (S1)	Non-financial corporations (S11)	Financial corporations (S12)	General governm ent (S13)	Households and NPISHs (S14_S15)	Rest of world (S2)
F89 - Other accounts receivable/payable excluding trade credits	S14_S15						
F - Total assets/liabilities	S2						
F1 - Monetary gold and SDRs	S2						
F2 - Currency and deposits	S2						
F21 - Currency	S2						
F22_F29 - Deposits	S2						
F3 - Debt securities	S2						
F31 - Debt securities, short-term	S2						
F32 - Debt securities, long-term	S2						
F4 - Loans	S2						
F41 - Loans, short-term	S2						
F42 - Loans, long-term	S2						
F5 - Equity and investment funds shares	S2						
F51 - Equity	S2						
F511 - Listed shares	S2						
F512+F519 - Unlisted shares and other equity	S2						
F52 - Investment funds shares or units	S2						
F6 - Insurance, pension and standardized guarantee schemes	S2						

*Continued ...*

**Annex 1.6: Detailed Template for Collecting FWTW Information –  
QUARTERLY & ANNUAL data: Sectors and Instruments (stocks and flows)**

Measure: current prices Not-applicable		Consolidation: Non-consolidated data for all sectors Tier 1      Tier 2; inclusion in the template under consideration					
Instrument/ proposed sector levels	Assets of:	Liabilities of:					
		Total economy (\$1)					Rest of world (S2)
		Total (\$1)	Non-financial corporations (S11)	Financial corporations (S12)	General governm ent (S13)	Households and NPISHs (S14_S15)	
F61 - Non-life insurance technical reserves	S2						
F62 - Life insurance and annuity entitlements	S2						
F63 - Pension entitlements	S2						
F64 - Claim of pension funds on pension managers	S2						
F65 - Entitlements to non-pension benefits	S2						
F66 - Provisions for calls under standardised guarantees	S2						
F7 - Financial derivatives and employee stock options	S2						
F71 - Financial derivatives	S2						
F72 - Employee stock options	S2						
F8 - Other accounts receivable/payable	S2						
F81 - Trade credits	S2						
F89 - Other accounts receivable/payable excluding trade credits	S2						

## **Chapter 2**

### **Recommendations of Earlier Committees - Implementation Status**

#### **Section I: Introduction**

2.1 The Government of India appointed the HLC in December 2007 to critically review the existing methodologies used to estimate saving and investment aggregates for the Indian economy and suggest measures for improvement. The major expectations from the Committee were (a) to assess whether the structural changes in income levels and saving behaviour of the Indian economy are reflected in the existing estimates, (b) to examine the empirical methods and procedures used in the estimates based on commodity-flow-method and FoF method, (c) to improve data quality, minimise data gaps, and revalidate the data bases in organised and unorganised sectors, and (d) to review the existing methodology and suggest improvements in the estimation of capital formation at the regional level. The HLC submitted its Report in 2009.

2.2 In 2015, the RBI constituted the Working Group (WG) on the Compilation of FoF Accounts for the Indian Economy under the Chairmanship of Dr. Deepak Mohanty, the Executive Director, to review the existing methodology for compilation of FoF accounts in India and to suggest changes required in the coverage of institutions, instruments and sources of data in the compilation procedure. The WG was also asked to suggest improvements in administrative, methodological and technological aspects to enhance the efficacy of the compilation process and prepare a manual on the compilation of the FoF accounts in India.

2.3 As there are some overlaps in the terms of reference assigned to this Committee with the HLC and the WG, it took note of the major recommendations made by them and examined the status of their implementation. These are discussed in Sections II and III, respectively. Section IV summarises the Committee's observations.

**Section II: High Level Committee on Estimation of Savings and Investment (2009) – Relevant Recommendations and Implementation Status**

2.4 The HLC identified a number of issues and gave its recommendations on saving estimates of households, private corporate and public sectors; estimates of capital formation at all-India level as well as at regional levels; FoF estimates; and separate saving estimates for pure households, household enterprises and unincorporated bodies.

2.5 The HLC also felt the need for (a) periodic revisions in the ‘rates and ratios’, (b) improving existing databases, (c) creating new databases to bridge data gaps and cross validations of estimates, and (d) moving from sample based estimation to the census based estimation, wherever possible, which are used in the NAS and the FoF accounts for both organised and unorganised sectors.

2.6 Out of 94 recommendations of the HLC, 11 recommendations were classified under the major head on compilation of FoF. In addition, there were 9 recommendations classified under various other heads, which have bearing on compilation of FoF. These 20 recommendations along with their implementation status are discussed below (Table 1).

2.7 Some of the major recommendations of the HLC were as follows:

- Increasing coverage of financial and non-financial companies used for compiling FoF and national accounts;
- Streamlining data on co-operative sector and bridging the data gaps;
- Providing combined balance sheet data of all insurance institutions (public and private; life and non-life) by IRDA as per the suggested FoF format;
- Incorporating data for the local self-government in the FoFs accounts.

**Table 1: Recommendations of the HLC Relating to FoF Accounts: Action Taken Report**

S. No.	Recommendation (with No.) of HLC	Implementation Status
	<b>Recommendations on FoFs Compilation</b>	
1.	<b>Data on Co-operative Sector:</b> <b>Recommendation XII.a:</b> All efforts should be undertaken to improve the time gap in the publication ‘Statistical Statements Relating to the Co-operative Movement in India (Credit and Non-credit societies)’, brought out by NABARD. (Action: <b>NABARD</b> )	To resolve the issue of delay in receipt of information from the State level reporting agencies viz., co-operative banks and Registrar of Cooperative Societies (RCS), and discussing modalities towards modification and simplification of the publication formats, CSO had made efforts in the past for holding a meeting of RCS of States. However, no meeting took place on the issue.
2.	<b>Recommendation XII.b:</b> In the light of genuine difficulties expressed by NABARD in regularly compiling the comprehensive data, NABARD may endeavour undertaking “projections” of household deposits in co-operative banks and credit societies, which could be revised when firm data become available. (Action: <b>NABARD</b> )	NABARD suggested that all the States/ UTs Governments and RCS may be made responsible (nodal) for the data publication and sharing with all the stakeholders (CSO and the RBI) for compilation of national accounts, saving estimates and FoF account in view of the 97th Constitutional Amendment. The amendment empowers State Governments to obtain periodic reports of activities and accounts of co-operatives.
3.	<b>Recommendation XII.c:</b> NABARD should continue in its role as the nodal agency for the co-operative sector and provide data for the compilation of national accounts, savings estimates and FoF accounts in so far as the co-operative sector is concerned. In this regard, NABARD may collaborate with National Federation of State Co-operative Banks (NAFSCOB), National Cooperative Union of India (NCUI) as these agencies are publishing some basic data on credit and non-credit societies. (Action: <b>NABARD</b> )	NABARD further suggested that MOSPI may be involved in the whole process to guide all concerned to collect and publish the required data.
4.	<b>Data on Financial Companies:</b> <b>Recommendation XII.d:</b> Since there exists large data gap in the estimation of non-banking companies,	<b>Implemented.</b> RBI has made all out efforts to increase the coverage of Financial and Investment companies. RBI has started

S. No.	Recommendation (with No.) of HLC	Implementation Status
	because of non-inclusion of a wide array of unregistered companies, the HLC recommended that a census should collect data on assets, liabilities, income and expenditure of NBFCs including the unregistered/ exempted category of NBFCs. The census should be conducted by DSIM, RBI in collaboration with the Department of Company Affairs, Government of India. <b>(Action: MCA and RBI)</b>	using data of Non-banking Financial and Investment companies as received from MCA in their study from 2013-14 onwards which has led to significant increase in the Paid-up Capital (PUC) coverage (91 percent in 2013-14, 78 percent for 2014-15, and 75 per cent in 2015-16). Companies reporting data to MCA by a cut-off date, are included in the RBI studies after due validation.
5.	<b>Recommendation XII.e:</b> The HLC recommended that the data emerging from the census on the assets/ liabilities position of the NBFCs should be appropriately incorporated in the FoFs accounts also. <b>(Action: RBI)</b>	
6.	<b>Recommendation XII.f:</b> In respect of companies registered with the RBI, data for registered companies have to be firmed up with appropriate consolidation and follow up if response is weak. For the unregistered companies, sample studies will have to be undertaken and their results will have to be used after establishing proper blow-up factors. <b>(Action: RBI)</b>	For the purpose of compilation of FoF accounts, the RBI Department of Non-Banking Supervision (DNBS) has commenced providing data relating to all deposit-taking NBFCs and all non-deposit taking systemically important NBFCs. The coverage of other non-deposit taking NBFCs is being expanded in a phased manner.
7.	<b>Consolidated data on the Insurance Sector:</b> <b>Recommendation XII.g:</b> The RBI may approach the IRDA to provide combined balance sheet for all insurance institutions – public and private - as per the suggested FoFs format. This will go a long way in the IRDA providing an alternative database not only for ‘life fund’ but also for FoFs compilation at the RBI from time to time. <b>(Action: IRDA)</b>	IRDA’s response on the format suggested by the HLC under various heads was as follows: Sources- a) Most of the private insurers have foreign joint venture. However, there is no column in the format in which the capital contributed by their foreign partner can be stated. b) It does not capture information about the “reserve and surplus”. c) It only captures information about the “Life Funds”. Does it mean that the fund for pension, annuity and Unit Linked

S. No.	Recommendation (with No.) of HLC	Implementation Status
		<p>Insurance Plan (ULIP) will not be part of the same? This needs clarity.</p> <p>d) It is not comprehensive as substantial part of the sources of fund in case of life insurance will be of policyholders' funds. The same has not been disclosed separately.</p> <p>Uses:</p> <ul style="list-style-type: none"> <li>a) Deposits- Information in the desired format is not available. Only the information about the deposits with scheduled and non-scheduled banks is available.</li> <li>b) Loans and Advances- At present the information about the loans to central/state Governments, banks and financial institutions, companies, etc., is only captured. However, information for the other categories as specified in the format is not captured.</li> <li>c) Investment: The details of investments in the format specified by the RBI is not captured at present.</li> </ul> <p>In view of the above, IRDA proposed that the format compiled for their Annual Report may be adopted. This will bring consistency and uniformity in the reporting."</p>
8.	<p><b>Consolidated data for Capital Market Institutions:</b></p> <p><b>Recommendation XII.h:</b> The SEBI may collect the consolidated balance sheet position for all registrars and broker houses and provide the data as per the format suggested by the Committee to be forwarded by the RBI, so that the same can be incorporated in the FoF accounts. <b>(Action: SEBI)</b></p>	<p><b>Implemented.</b> SEBI informed that as most of the capital market entities/institutions registered with the MCA, records like balance sheet as at the end of the each accounting period, profit and loss account are available with them. Therefore, SEBI requested RBI to extract the relevant information from MCA portal directly. However, RBI (DEPR) felt that these capital market institutions, are involved in non-fund based activities and thus may not be included in the FoF accounts.</p>
9.	<p><b>Recommendation XII.i:</b> The HLC recommended that the consolidated Statements of assets/liabilities of all capital market institutions (namely, merchant bankers and registered brokers) should be compiled by the</p>	<p>Further, it may also be noted that RBI studies on non-government financial and investment companies already covers all financial</p>

S. No.	Recommendation (with No.) of HLC	Implementation Status
	SEBI or have them compiled and forwarded to RBI for compilation of FoFs account of the Indian economy. <b>(Action: SEBI)</b>	companies for which data is available with the MCA and which pass data integrity checks.
10.	<b>Ownership of Government securities:</b> <b>Recommendation XII.j:</b> The HLC recommended that an appropriate format as prescribed in this Report on the ownership pattern of Government securities (consolidated for all levels of Government), comprising six categories, viz., 1) Government , 2) Banks, 3) Financial Sector other than Banks, 4) Non-Service Sector (Corporates, Firms and Societies), 5) External Sector and 6) Household Sector, may be prepared by the RBI as at end-March every year, so that the residual status can be accorded to household (as defined in national accounts and FoF framework) in this instrument. The concerned Department within the RBI should ensure the providing of such information for estimation of household financial savings estimates. <b>(Action: RBI)</b>	<b>Implemented.</b> RBI informed that the data in Table 122 of the Handbook of Statistics of the Indian Economy 2015-16 viz., Ownership of Central and State Government securities, shows holdings of government securities as per eleven categories, viz., (i) RBI (own account) (ii) Scheduled Commercial Banks (iii) co-operative banks (iv) Primary Dealers (v) Insurance Companies (vi) Financial Institutions (vii) Mutual Funds (viii) Provident Funds (ix) Corporates (x) Foreign institutional investors and (xi) Others.
11.	<b>Data on Local Self-Governments:</b> <b>Recommendation XII.k:</b> In respect of the accounts of local authorities, only the data for port trusts are available. In this regard, the data for the local self-Government may also be provided to enhance the coverage of FoFs accounts. <b>(Action: CSO)</b>	<b>On-going process.</b>

*Report of the Committee on Financial Sector Statistics, 2018*

S. No.	Recommendation (with No.) of HLC	Implementation Status
<b>Other Recommendations Relevant to Flow of Funds</b>		
12.	<p><b>Recommendation VI.c:</b> The HLC recommended that accounts of the Indian economy need to be compiled regularly and in a more up-to-date manner. Current data publication of FoF accounts has also been reduced from 21 to 17 months. <b>(Action: RBI)</b></p>	<p><b>On-going process:</b> RBI informed that attempts are being made to compile the FoF on a regular basis as well as to close the data gaps/constraints in the compilation process. Further, the lag of There is a need to closely examine the gaps and constraints coming in the way of compiling months to 17 months.</p> <p>Over the years, some improvements in the data compilation processes have been progressively made by inter-alia, collating consolidated information from data repositories/regulators, instead of consolidating the same from individual entities. For instance, the consolidated data for the insurance sector were sourced from IRDA. The coverage of HFC and Mutual Funds has been improved significantly. Consolidated data on NBFCs are being obtained from DNBS of the RBI, instead of the earlier practice of estimating from the survey results of 'Financial and Investment Companies'. In the co-operative sector, consolidated balance sheet data of State Cooperative Banks and District Central Cooperative Banks are being obtained from NABARD.</p>
13.	<p><b>Recommendation VI.bb:</b> Till a reliable flow of data from the SEBI on various parameters is available on a regular basis, the need for a blow-up factor for computing household investment in the shares, debentures, mutual funds and bonds of all companies is there. Accordingly, global paid-up capital series needs to be provided to the RBI by the Ministry of Corporate Affairs. <b>(Action: MCA and RBI)</b></p>	<p><b>Implemented.</b> The global paid-up capital series is provided by the MCA to the RBI as and when required.</p> <p>RBI informed that at present, households' investments in shares and mutual funds are compiled as follows: i) Data on total capital raised by public and private limited companies and mutual funds are obtained from SEBI (through Division of Financial Markets, DEPR, RBI). (ii) Households' share in the total capital raised is based on past ratios and for mutual funds, it is based on data available with SEBI.</p>



S. No.	Recommendation (with No.) of HLC	Implementation Status
14.	<b>Recommendation VI.dd:</b> Till the MCA 21 data is available and can be used for the purpose of financial savings estimation under trade debt, the existing methodology of computing trade debt may be continued. For estimating trade debt figure for all companies from the sample studies of the RBI, there is a need to have an appropriate blow-up factor. As recommended earlier, global paid-up capital series needs to be provided to the RBI by the Ministry of Corporate Affairs. <b>(Action: MCA and RBI)</b>	<b>Implemented.</b>
15.	<b>Recommendation VII.i:</b> In order to capture the data at the RBI-end, the MCA needs to provide appropriate access rights, specifically computable format electronically, to the MCA21 database so that dataflow is ensured. <b>(Action: MCA and RBI)</b>	<b>Implemented.</b> MCA informed that appropriate rights have been provided to RBI officials to access records available in MCA 21 database. RBI confirmed that a suitable mechanism has already been put in place in consultation with MCA for regular supply of data. However, at present there might be some technical issues in accessing these databases at the RBI end.
16.	<b>Recommendation VI.w:</b> The HLC recommended the involvement of the SEBI in providing information on a regular basis to the RBI on areas like annual subscription to public issues of shares, debentures, mutual funds and commercial bonds (each separately and consolidated for all depositories) as per the ownership categories (categories of subscribers are Qualified Institutional Investors, FIIs, NRIs, corporate, trusts and other categories) from which the RBI will extract household investment in shares, debentures, mutual funds and commercial bonds for household financial savings estimation (Annex A6.5.1). Registrars/Depositories/AMFI need to be involved for	<b>Implemented.</b> SEBI informed that the Data Warehousing and Business Intelligence System (DWBIS) database provides the ownership details as per the following categories – corporate, FI/FII, HUF individuals and others. However, the categories which FoF mandates are much wider and includes NRIs, trusts and others. Attempts are being made to include all the parameters in the database. RBI confirmed that the information relating to public issues of shares, debentures, mutual funds and commercial bonds is being received from SEBI and is being used for FoF compilation.

S. No.	Recommendation (with No.) of HLC	Implementation Status
	regular data support. Henceforth, the SEBI would arrange to collect the required data from these entities, which are the primary sources of those data, by sensitising them and explaining the requirement of their data for estimation of household financial savings. <b>(Action: SEBI and RBI)</b>	
17.	<b>Recommendations VI.hh and VI.p:</b> The HLC recommended that the IRDA should be involved in the household financial savings estimation by way of providing regular information on 'life funds', bonus to policy holders and loans and advances, consolidated for all insurance institutions – both in the public and private sector in the format prescribed in this Report. <b>(Action: IRDA)</b>	<b>Implemented.</b> IRDA has sent following comments to the RBI: "Data on (i) Life Fund and (ii) Bonus to policy holders are not captured in the format suggested by the HLC. They informed that generally life insurance funds will not be participated by trust, unincorporated enterprises of farm business or unincorporated enterprises of non-farm business. They suggested that instead of having break-up of life fund into individuals, trusts etc., it will be better to have the following two break-up: (a) Individuals – (i) Micro, and (ii) Other than Micro (b) Group – (i) Micro, (ii) Other than Micro Apart from above, they also suggested to include pension/ annuity funds and ULIP funds. RBI confirmed that the data on life funds for both public and private sector have been provided by IRDA since 2012-13. These data have been taken into account for compilation of FoF accounts.
18.	<b>Recommendation VI.t:</b> Since there is a need to capture household savings in the form of pension funds, the relevant apex body, namely, the PFRDA should collect and disseminate such information on a regular basis. <b>(Action: PFRDA)</b>	Implemented. PFRDA informed that they are collecting data on number of subscribers and corpus of each category of subscribers (i.e. Central Government employees, state Government employees, Private Sector and NPS-Lite) under NPS on monthly intervals which is uploaded by the Department of Financial Services, Ministry of Finance, Government of India, on their website.

S. No.	Recommendation (with No.) of HLC	Implementation Status
		RBI confirmed that data on households' savings in NPS are collected by RBI from PFRDA on a regular basis.
19.	<b>Recommendation VIII.b:</b> The CSO should make separate estimates of GDP, consumption expenditure, savings and capital formation for the LBs. These could best be prepared based on census of ULBs and on sample basis in the case of RLBs. For this purpose, States may be provided financial assistance to undertake analysis of LBs' accounts. <b>(Action: CSO)</b>	CSO informed that as per the recommendations of the Thirteenth Finance Commission (TFC) for preparing the LBs' accounts as one of its milestones, CSO devised a simple schedule consisting of sections regarding the current and capital receipts as well as current and capital expenditure at aggregate level for each local body and a separate section to enter the information of funds available with the local body. State DES have taken initiative in this regard and collected data based on the available resources. As a result, in the 2011-12 series, the accounts of both small and large LBs have been compiled on the basis of a larger sample covering about 60 percent of the transfers given. As per the design for collecting data from LBs for preparing accounts, ULBs are covered on census basis and RLBs on sample basis. The CSO at present are compiling separate estimates of GDP, consumption expenditure, savings and capital formation for the LBs and including them in the national level estimates.
20.	<b>Recommendation VII.n:</b> The HLC emphasises the need for an ongoing consultative approach and strengthening of the statistical system at concerned organisations namely, CSO, NABARD, MCA and RBI. <b>(Action: CSO, NABARD, MCA and RBI)</b>	Consultations are held as and when required.

**Section III: Recommendations of the Working Group (WG) on Compilation of FoF Accounts of the Indian Economy (2015) – Implementation Status**

2.8 The major emphasis of the WG was to align India's FoF accounts with the SNA 2008 to the extent possible. The WG reviewed the existing FoF methodology and identified the data gaps. It made extensive recommendations to bridge the data gaps and broadly align compilation of India's FoF with SNA 2008 in terms of classification of sectors and instruments. Based on availability of data and ease of implementation, recommendations were grouped into 'short term' and 'medium to long term'. It was envisaged that the medium to long-term recommendations would be implemented as and when new data become available and it is feasible to compile them.

2.9 Some of the major recommendations of the WG are:

- i) Standardisation of institutional sectors/ sub-sectors/ categories and instruments broadly in alignment with the SNA 2008 for compilation and presentation of FoF accounts.
- ii) Incorporation of local self-governments (rural and urban LBs), and State public sector enterprises (SPSEs)' data in the FoF accounts.
- iii) Bifurcation of 'debt securities' and 'loans' into short-term and long-term; reporting of equity in three categories - 'listed shares', 'unlisted shares' and 'other equity'; categorisation of deposits into 'transferable (interbank and non-bank separately)' and 'others'.
- iv) Assessing the feasibility of compiling and publishing the 'valuation account' and the 'other changes in volume account' separately in consultation with the CSO; and recording of the discrepancy between the stocks and flows in a separate "Reconciliation Table".
- v) Vetting of FoF data with the concerned data suppliers and other stakeholders of the respective sectors.
- vi) Examining possibility of compiling and publishing FoF accounts on quarterly basis beginning with the financial sector.

2.10 Overall, 37 recommendations for implementation in the short-term and 18 recommendations for the long-term were made by the WG. Of these, 22 short-term and 1 long-term recommendations are already implemented. Implementation status of other recommendations is given in Table 2 below.

**Table 2: Recommendations of the Working-Group on Compilation of FoF Accounts of the Indian Economy - Implementation Status**

S. No.	Recommendation	Status
<b>I. Recommendations for the Short-Term</b>		
<b>I.1 Sectors</b>		
1	The compilation of the FoF accounts for the Indian economy may be restructured with the adoption of the following five mutually exclusive institutional sectors: (i) Non-Financial Corporations, (ii) Financial Corporations, (iii) General Government, (iv) Households and NPISHs, and (v) the Rest of the World, which is largely in line with the SNA 2008 framework except that the NPISHs would not be reported separately due to non-availability of data.	Implemented. The FoF accounts under the new series are available from 2011-12 onwards.
2	Non-Financial Corporations sector would include: (a) 'Non-Government Non-Financial Public and Private Limited Companies', (b) Government Non-Financial Departmental/Non-Departmental Commercial Undertakings (NDCUs), (c) Port Trusts (both public and private) and (d) the Cooperative Non-Credit Societies. The NDCUs would comprise the non-financial Central and State Public Sector Enterprises (CPSEs and SPSEs) and the Power Generation/Transmission/ Distribution Companies/ SEBs. The State level enterprises, would however, be covered in the medium to long term. Accordingly, the CPSEs, SEBs/SPUs and Port Trusts will not be included under the Government Sector as per the current practice.	Implemented except that data of the SPSEs are yet to be incorporated.
3	While compiling the FoF accounts for the CPSEs based on data from the Survey done by the Department of Public Enterprises (DPE), Ministry of the Heavy Industries and Public Enterprises, data pertaining to financial enterprises (such as Export Credit Guarantee Corporation of India Ltd.(ECGC), Housing and Urban Development Corporation	Implemented.

S. No.	Recommendation	Status
	Ltd.(HUDCO), Indian Infrastructure Finance Company (IIFC), Indian Railway Financial Corporation Ltd (IRFC), Indian Renewable Energy Development Agency (IREDA) and Power Finance Corporation (PFC)) must be excluded to avoid double-counting.	
4	As regards compilation of the FoF accounts for the non-financial companies, MCA's/ DSIM's database may be considered. Simultaneously, the possibility of collecting data relating to listed companies from the SEBI/ exchanges may also be examined. The use of data from two different sources could lead to the possibility of double counting which may be corrected by the compilers.	Implemented.
5	Keeping in view the non-standard balance sheet formats adopted by non-financial and financial corporations, the possibility of collecting information regarding ownership pattern of financial claims and assets from the Custodians and SEBI may be explored.	To be implemented.
6	Recognising that the Co-operative non-credit societies are too marginal/small to have much impact on the overall co-operatives scenario, the estimation process based on the earlier method may continue to be used for the Co-operative non-credit societies wherever data is not available in time.	On receipt of data from NABARD, the procedure will be changed.
7	The Financial Corporations sector would constitute seven sub-sectors, namely, (a) the Central Bank, (b) 'deposit-taking corporations except the Central Bank', (c) Money Market funds (MMFs), (d) Non-MMFs, (e) other financial intermediaries except insurance corporations and pension funds, (f) insurance corporations, and (g) pension funds and non-government provident funds. The Central and State Government Employees Provident Fund would, however, be included under the Central and State Governments sectors, respectively.	Partially Implemented.
8	The financial flows of the RBI may be compiled as is being done currently. The source of data for the compilation of the FoF accounts for the RBI is the Statement of Affairs of the RBI provided by the	To be implemented.

S. No.	Recommendation	Status
	DGBA/RBI. However, in the Statement of Affairs of the RBI, the sector-wise break-up of some items such as 'other banks' deposits, other deposits', 'bills payable' are not furnished. The sector-wise break-up is estimated using 'special returns' called from all the regional offices of the RBI. With the implementation of the Core Banking System (CBS) in the RBI, it may be explored to obtain sector-wise break-up from the DGBA once the CBS stabilises.	
9	The sector 'deposit-taking corporations except central bank' may comprise (a) all scheduled commercial banks (including RRBs), (b) all non-scheduled commercial banks (including LAB), (c) deposit-taking Cooperative Banks (StCBs, DCCBs and UCBs), (d) deposit-taking NBFCs (NBFC-D), (e) deposit-taking housing finance companies (HFCs), and (f) deposit-taking co-operative credit societies.	Implemented.
10	The consolidated data pertaining to co-operative banks and credit societies may be sourced from NABARD and RBI (Financial Inclusion and Development Department (FIDD) and Department of Co-operative Banking Regulation (DCBR)).	Implemented.
11	The Mutual Funds may be shown as two separate sub-sectors, Money-Market Funds (MMF) and Non-MMF under the financial corporations sector. The consolidated data for the MMFs and non-MMFs may be provided by SEBI.	Partially implemented.
12	'Other financial intermediaries except insurance corporations and pension/Provident funds' may include (i) Non-Deposit taking Non-Banking Finance Companies (NBFCs-ND, including systemically important NBFCs-ND (i.e., NBFC-ND-SI)), (ii) Non-deposit taking HFCs (HFC-ND) (including HUDCO), (iii) central public sector financial enterprises (such as IFCI, IDFC, REC, PFC, IFCI Venture Capital Funds Limited, IREDA, IIFC, IRFC, Industrial Investment Bank of India), ECGC, and National Cooperative Development Corporation (NCDC), (iv) all India Financial Institutions (Exim Bank, NABARD, NHB and SIDBI,), (v) state finance corporations (SFCs), (vi) state industrial development corporations (SIDCs),	Implemented.

S. No.	Recommendation	Status
	and (vii) Other financial corporations (such as SBI DFHI and SBI Capital).	
13	The data provided by the DNBR on the NBFC-ND-SIs and NBFC-ND together with DSIM data may be used for the compilation of the FoF accounts of financial and investment companies' sub-sector. The compilers should take into account the possibility of double counting.	Implemented.
14	The consolidated data pertaining to Housing Finance Companies may be provided by the NHB.	Implemented.
15	The financial flows of the insurance sector (including both life insurance and non-life insurance) may continue to be presented as a separate sub-sector under the 'financial corporations' sector. The consolidated data pertaining to insurance corporations may be sourced from IRDA.	Implemented.
16	The FoF accounts of the provident/pension funds may be compiled separately and comprise non-Government provident/pension funds (such as Public Provident Fund (PPF), Employees (non-Government) Provident Fund Scheme (EPFO), Seamen's P.F. Scheme, Coal Mines P.F., Assam Tea plantation scheme, Local Authority Provident Fund, Dock Labour Board, as well as the Employees Provident Funds of RBI, Commercial Banks, L.I.C., ECGC, Employees State Insurance Corporation (ESIC), Port Trusts, Air India, International Airport Authority and Other StatutoryCorporations).However,as the investment/asset pattern of the Central and State Government Employees Provident Funds are not available separately, these two funds would continue to be included in the respective Government sectors as is the current practice. The Pension Funds may include the NPS and the pension funds of the EPF scheme, Coal Mines, Assam Tea Plantation, Port Trusts and Dock Labour Board.	Implemented.
17	The consolidated FoF data pertaining to Cooperative Banks and Societies, Mutual Funds [Money Market Funds (MMF) and Non-MMFs], Insurance Companies, Housing Finance Companies could be provided by the	Implemented.

S. No.	Recommendation	Status
	respective regulators to RBI, namely NABARD, SEBI, IRDA, and NHB.	
18	The extant method of sub-sectoring of the general government may be continued.	No action required.
19	The current practice of obtaining the data for the ROW sector, which is derived from the BOP statistics from RBI (DEPR) may be continued.	No action required.
20	The current practice of obtaining the households sector as a residual may be continued.	No action required.
<b>I.2 Financial Instruments</b>		
21	In the short term, the following seven main financial instruments may be covered in the FoF accounts: (a) Monetary gold and SDRs, (b) Currency and deposits, (c) Debt securities, (d) Loans, (e) Equity and investment fund shares and (f) Insurance, pension and standardized guarantee schemes, and (g) ‘Other accounts receivable or payable’.	Implemented. Financial instruments in the FoF accounts have been standardised from the year 2011-12 onwards.
22	The compilation and reporting of the ‘monetary gold’ and ‘SDRs’ may be aligned with that in SNA 2008. The transaction in ‘gold coin and bullion’ presently taken for the FoF accounts may be classified under the instrument ‘monetary gold’.	Implemented.
23	The allocation of SDRs may be captured and recorded under the Sources side of the Central Government sector as an additional item in the FoF accounts. For the ROW sector, the SDR allocation may be classified on the ‘Uses’ side under the head, increase in assets and under the sub-head, ‘investments - Government’.	Implemented.
24	The extant practice of compiling and reporting the transactions in currency and deposits may be continued.	No action required.
25	The present classification of deposits as per standard Indian convention into saving deposits, current deposits and term (fixed) deposits in the India’s FoF accounts may be continued (deviating from SNA 2008 classification of transferable deposits, etc.) with appropriate explanatory notes that would aid a better understanding of these instruments to international	To be implemented.

S. No.	Recommendation	Status
	users. The sub-group further suggests the bifurcation of term deposits into short-term and long-term deposits on the basis of original maturity, as suggested in SNA 2008.	
26	"Investments" may continue to be a separate head under Indian FoF. The extant instrument of 'investments' may be sub-categorised into (i) Equity, (ii) Preference shares and (iii) Debt Securities. The Debt Securities may be further classified into (a) Central Government Securities, (b) State Government Securities, (c) Other Government Securities, (d) Corporate Securities (Bonds and Commercial Paper), (e) Bank Securities, (f) Other Financial Institutions' Securities (of which mutual funds), (g) Foreign Securities and (h) Other Securities. The categorisation of debt securities into short-term and long-term depending on the original term of maturity may be examined.	Partially Implemented. The categorisation of debt securities into short-term and long-term depending on the original term of maturity is not yet implemented as the tenor-wise reporting is not being done at present. It will be adopted in due course.
27	Appropriateness of reporting of CDs as a separate sub-classification under the sub-head 'term deposits' of the major head 'Deposits', with a caveat that these are strictly not comparable to deposits as per SNA 2008, may be examined.	To be implemented.
28	The issue of debentures by the SCARDBs is going to be discontinued though the debentures issued till now are likely to be held in the same form till maturity. The NABARD has already issued circular to SCARDBs for switch over from debentures to loan system. In view of this, the necessary changes be made in the FoF accounts of the SCARDBs.	Implemented.
29	Classification of loans into two categories, i.e. 'in domestic currency' and 'in foreign currency', and their further classification into short-term and long-term depending on the original term of maturity may be examined. While short-term loans comprise loans that have an original maturity of one year or less, long-term loans have an original maturity of more than one year.	To be implemented.
30	Though banks are classifying the RIDF under investments in their balance sheets, these could be shown separately on the liability side of the sub-sector 'other financial intermediaries except insurance and	To be implemented.

S. No.	Recommendation	Status
	pension funds' on the basis of information gathered from the concerned institutions in this regard.	
31	The borrowing of the StCBs and DCCBs from To be implemented. NABARD may be shown separately in the FoF accounts format. The data on borrowing of the StCBs and DCCBs from NABARD are available with DCBR.	
32	With a view to provide greater disaggregation, the data on Banking Capital may be classified into deposits, loans, investments and others based on 'International Banking Statistics' published by the RBI.	To be implemented.
33	The trade credit data available with Division of International Trade and Finance (DITF) of DEPR may be taken for data on trade credit given by ROW to India. Similarly, the possibility of inclusion of data on trade credit given by India to RoW from the item 'export receipts' shown as 'other capital' in BoP may be explored.	To be implemented.
34	Capturing of transactions under the Liberalized Remittance Scheme (LRS) for resident individuals under a separate head may be examined.	To be implemented.

### I.3 Other Recommendations

35	Separate Reporting of total sources/uses for the domestic economy and the rest of the World: In the extant FoF sector Statements, the last column reports an amount denominated as TOTAL which is the sum of all the amounts recorded in each domestic institutional sector and also the rest of the world for a certain asset (uses)/liability (sources) category. However, the SNA 2008 reports total for S1 (Domestic economy) and for S2 (Rest of the World) separately. The WG recommended adoption of this terminology.	To be implemented.
36	Once the sectoral FoF accounts are compiled, joint meetings could be held with the concerned data suppliers and other stakeholders to get the FoF accounts data of the respective sectors vetted and validated.	To be implemented.
37	A review mechanism be put in place wherein the methodology, data gaps, and other issues are	To be implemented.

S. No.	Recommendation	Status
	reviewed at periodic intervals (preferably once in three years).	
<b>II. Recommendations for the Medium to Long-Term</b>		
<b>II.1 Sectors</b>		
38	In the Non-Financial Corporations sector, the inclusion of State Public Sector Enterprises (SPSEs), Producer Companies, 'Micro, Small and Medium Enterprises (MSMEs) and Water Users' Association (WUA) may be examined.	To be implemented. Data on SPSEs have been requested from CSO. Data on other entities are not available.
39	Data on SPSEs may be resorted from the Report of the State Level Public Enterprises Survey (or, SPSEs) released by the DPE up to 2007-08, and some estimations may be made while compiling the FoF accounts for recent years. However, exclusion of financial enterprises from this data may be ensured to avoid double counting.	To be implemented. Data on SPSEs are being provided regularly by CSO.
40	The data on CPSEs, SLPEs (or SPSEs), SEBs and publicly owned port trusts may be shown separately under the sub-sector Public Non-Financial Corporations, within the Non-Financial Corporation sector.	Implemented except for SPSEs.
41	Examining the inclusion of the Micro Finance Institutions (MFIs) established under the Society Registration Act, 1860, Indian Trusts Act, 1882, Self Help Co-operative Act, and Multi State Co-operative Societies Act, in the FoF accounts under the sector 'other financial intermediaries except insurance corporations and pension funds'.	To be implemented.
42	In the Financial Corporations sector, the incorporation of the sub-sectors 'financial auxiliaries' and 'captive financial institutions and money lenders' may be examined.	To be implemented.
43	The incorporation of Venture Capital Funds (VCFs), Portfolio Managers and MFIs in the sub-sector 'Other	To be implemented.

S. No.	Recommendation	Status
	financial intermediaries except insurance corporations and pension funds' may be assessed.	
44	The SNA 2008 classifies the following institutional units as financial auxiliaries: (i) Insurance brokers, (ii) loan brokers, (iii) share brokers, (iv) floatation corporations, (v) asset management companies, (vi) pension fund managers, (vii) companies engaged in foreign exchange activities, (viii) deposit account management services, (ix) credit-related services, (x) financial leasing services, (xi) trade finance related services, (xii) payment and money transmission services, (xiii) fund management services, (xiv) financial consultancy and advisory services, (xv) underwriting services, (xvi) clearing and settlement services, (xvii) derivative, stock, securities and foreign exchange trading services, (xviii) Portfolio Managers, (xix) Venture Capital Funds and (xx) other financial services. The WG recommended that the availability of data for these institutional units with MCA, SEBI and Stock Exchanges may be examined.	To be implemented.
45	The CSO and the Directorate of Economics and Statistics (DES) in each State Government may be contacted for obtaining data regarding urban and rural LBs for inclusion in the General Government sector.	To be implemented.
46	The data availability and the feasibility of classifying each of the sub-sectors in the non-financial and financial corporations sectors into public, national private and foreign controlled corporations may be examined.	To be implemented.
<b>II.2 Instruments</b>		
47	<p>The methodology of and data availability for compiling the following financial instruments may be examined:</p> <p>(a) categorisation of 'deposits' into 'transferable deposits' and 'other deposits' and the further classification of 'transferable deposits' into 'inter-bank positions' and 'other transferable deposits',</p> <p>(b) bifurcation of the financial instruments 'debt securities' and loans' into short-term and long-term,</p>	To be implemented.

S. No.	Recommendation	Status
	(c) reporting of ‘equity’ in three categories, ‘listed shares, unlisted shares, and ‘other equity’.	
48	The WG recommended that the classification of deposits with the RBI into ‘transferable’ ('inter-bank' positions and ‘other transferable deposits’) and ‘other deposits’ may be examined.	To be implemented.
49	An additional instrument “Financial Derivatives and Employee Stock Options” in line with SNA 2008 may be introduced. Explore FETERS data (available with DSIM) for capturing ‘financial derivatives and employee stock option’ transactions between residents and non-residents, through Foreign Exchange Transactions Electronic Reporting System (FETERS) data (available with DSIM).	To be implemented.
50	The nature of data available with Clearing Corporation of India Ltd (CCIL) (on transactions in over-the-counter (OTC) foreign exchange derivatives, Rupee Interest Rate Swap (IRS), Forward Rate Agreement (FRA) and Credit Default Swaps (CDS)) and SEBI (on exchange-traded derivative transactions such as equity futures, currency futures and interest rate futures) may be examined from the view point of incorporating the same in the FoF Accounts.	To be implemented.

### **II.3 Other Recommendations**

51	The feasibility of compiling and publishing separately the ‘valuation account’ and the ‘other changes in volume account’ could be assessed once the methodology to be adopted is finalised in consultation with the CSO.	To be implemented.
52	The discrepancy between the stocks and flows could be recorded in a “Reconciliation Table”.	To be implemented.
53	The RBI may examine the possibility of compiling and publishing the FoF accounts on quarterly basis beginning with the financial sector.	To be implemented.
54	National Balance Sheet (NBS) may be compiled by the RBI on an annual basis using the same sectorisation as followed for the FoF accounts in the revised framework as per the WG Report and using	To be implemented.

S. No.	Recommendation	Status
	the sectoral balance sheet data as received for the FoF accounts. Provisional NBS may be released with one year lag and final NBS data with a lag of two years.	
55	The data flow into the FoF database to be automated to the extent possible. Institution of a database system (such as Oracle) at the back-end may be examined.	To be implemented.

#### **Section IV. Role of the Committee**

2.11 The Committee observed that the HLC and the WG covered almost the entire gamut of FoF compilation. Many of the recommendations made by them have already been implemented. However, implementation of some of the recommendations are pending for long probably due to poor information system in those sectors. Important among them are the co-operative sector and the local self-Government (rural and urban LBs) sector. There is clearly a need to create new databases for including these sectors in India's FoF. Further, there are incompleteness in databases being used for FoF compilation in respect of other sectors. For example, the regulatory MCA data for non-financial as well as financial corporation sector is incomplete on account of non-reporting. Therefore, there is a need to explore alternative approach. Similarly, data on ownership category is available only for new issues while it is required for the entire sector. Further, coverage of the schemes under insurance and the provident /pension funds may not be complete.

2.12 The Committee, therefore, decided to look into the reasons for non-compliance or incomplete compliance and make relevant suggestions, wherever possible. Next few Chapter will deal with the same.

## **Chapter 3**

### **Current Status of the Compilation of the Flow of Funds Accounts of the Indian Economy**

#### **Section I: Introduction**

3.1 RBI has been compiling the annual FoF accounts on FWTW basis for the Indian economy starting from the year 1951-52. The methodology for compilation of the FoF is reviewed regularly, which is well chronicled in the Report of the WG. The sector and instrument-wise classification and the associated nomenclature of the FoF accounts have been broadly aligned with SNA 2008 with effect from the year 2011-12. Also, as per the template prescribed by the G20 DGI group, intra-sector transactions are presently included under sources and uses of funds of the different sectors. This is a conceptual departure from the earlier prescription, which inflates the aggregate flows from each sector. Some of the prescriptions of SNA 2008 that have not yet been implemented were highlighted by the WG and its implementation status are mentioned in chapter 2. Timeliness in release of FoF Accounts for the Indian Economy has also been reduced from 21 months to 17 months (data for 2015-16 was released in August 2017<sup>4</sup> along with detailed statements<sup>5</sup>). However, the present system still suffers from lack of timely and relevant data for some of the sectors.

3.2 In this backdrop, the present chapter lists out the data sources and the time lag in receipt of data from each source in Section II. Section III highlights some of the improvements brought about in the recent past and suggests ways to overcome some of the outstanding issues. To deal with incompleteness and timely receipt of data relating to the important segment of private non-financial corporations, the Committee has done some exploratory exercise which is described separately in Section IV. Section V suggests the remedial measures, which could be undertaken to bridge the gap between the CSO and the RBI data. Section VI discusses the issues in compilation of FoF at

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<sup>4</sup>[https://www.rbi.org.in/Scripts/BS\\_ViewBulletin.aspx?Id=17042](https://www.rbi.org.in/Scripts/BS_ViewBulletin.aspx?Id=17042)

<sup>5</sup> The detailed statements 1 to 9 relating to FoF were released separately on www.rbi.org.in; the hyperlinks to these statements are provided in the Press Release for the August 2017 issue of the RBI Bulletin in which this article appeared.

quarterly frequency. Strengthening of existing database systems and other recommendations are discussed in Section VII.

## **Section II: Sources of Data**

3.3 In the RBI, the National Accounts Analysis Division (NAAD) in the DEPR is entrusted with compilation of the FoF accounts sourcing data from various agencies. Data sources for each sector are provided in Annex 3.1. In its present format, almost entire flows are calculated as changes in the stock position at the end of the periods. In some cases, where stock data are not available, actual flows are used.

## **Section III. Issues in FoF Compilation and Suggestions**

3.4 With availability of MCA 21 data, some improvement in the coverage of private non-financial sector (in terms of the PUC) has been made. Also, sourcing of data from the DNBS (RBI) resulted in significant enhancement in the coverage of NBFCs. Regulators of the Insurance and the Pension and Provident Fund sectors, viz., the IRDA and the PFRDA have also contributed by providing the consolidated position of the respective sectors. As against this, data from the co-operative sector and LBs remain the weakest link. Besides the timeliness, there are also issues regarding the adequacy of available data. In this regard, the Committee made the following suggestions for improvement:

### **a) Co-operative Sector**

- i) While the balance sheet data of the StCBs and the DCCBs are made available by the NABARD and the DCBR (RBI) in reasonable time, NABARD has discontinued publishing data for other constituents of the rural co-operative sector. NABARD suggested that all the State/ UT Governments may be made responsible for collection of co-operative sector data, as the 97th Constitutional amendment empowers them to do so. RCS may be made the nodal agency for the same and MOSPI may be involved in guiding them. The Committee agreed with the above suggestion.

However, the Committee maintained that considering NABARD's vast experience in this area, it may coordinate a meeting of representatives from some select RCS, the RBI and the CSO to kick start the process.

- ii) Also, NABARD may provide projections on co-operative sector data as required in preparation of the FoF accounts and to start with, estimation of household sector's deposits with the co-operatives at the State level may be attempted.
  - iii) Data on PACS are released by NAFSCOB with a lag of 15-18 months. It may be used for compilation of FoF.
- b) **Micro-Finance Institutions**
- Another limitation in the present set up is non-availability of data in respect of the MFIs. The Committee suggests that the matter may be pursued with their apex bodies like Sa-Dhan which has 180 members, for submission of the required data.
- c) **Non-Financial and Financial Corporations**

- i) SNA recommends reporting of 'equity' as, 'listed shares', 'unlisted shares', and 'other equity'. Presently, information on listed shares is available with the SEBI. As such, unlisted shares information may be obtained by deducting the amount of listed shares from total shares (as provided by the MCA). As the share of 'other equity' is expected to be negligible at present, it may be ignored.
- ii) Another issue in FoF compilation is that it requires institutional (economic sectors) classification of equity holdings. This is estimated using data on subscription to the new issues as maintained by the SEBI. As a large part of corporate sector is privately<sup>6</sup> owned, the ratio based on data of only public issues probably underestimates investment of the household sector in equity instruments. In fact, this ratio may not be correct even for all listed equities, as it does not take into account change of ownership on account of secondary

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<sup>6</sup>Some commonly used ownership structures other than public ownership are private limited, partnership and proprietorship, etc.

market trading. Similarly, it becomes difficult to estimate net acquisition of debt assets by households as the data on gross issuance of public debt securities by corporates are captured by SEBI, but the information pertaining to redemptions is not available. As most of the debt as well as equity are nowadays being held in demat form, the Committee suggests that SEBI may explore collecting holdings data in respect of corporate debt as well as listed/unlisted equity through the depositories/ custodians (National Securities Depository Ltd. (NSDL)/ Central Depository Services (India) Ltd (CDSL)); and also from the Registrars and Transfer Agents (RTA). If necessary, depositories/ custodians/ RTAs may be advised (by the SEBI/ the MCA) to maintain broad economic sector classification of security holders.

- iii) However, from the long-term perspective, to overcome the issues discussed in the preceding two paras, the MCA should capture economic sector-wise equity/ debentures holdings for each company (both financial and non-financial); and also a separate system for capturing details of ‘other equity’ (equity in the form other than shares). As regards the former, MCA is already collecting information on select parameters (listing status, principal business activity, equity shares and debentures issued/ redeemed during the year, institutional ownership of shareholding) from companies, each financial year, in Form MGT-7. However, ownership information is not available for debt instruments (debentures/ loans, etc.). Also, the ownership classification is not as per FoF requirement and the information is available only in respect of the reporting companies. Minor changes in the format of this return *viz.*, bifurcation of ownership of the ‘Government companies’ and ‘body corporate’ into financial and non-financial categories, will make it the most useful database for FoF compilation. Further, ownership information may be obtained for debt instruments, such as loans/ debentures/ bonds also.
- iv) At present, for classification of a company into financial and non-financial, RBI (DSIM) relies mainly on the economic activity code as reflected in the Corporate Identification Number (CIN) allotted to it. However, the CIN is assigned to a company at the time of incorporation of the company. As Form

MGT-7 captures current business activity of a company, the Committee recommends that the MCA may provide company-wise detailed MGT-7 data each year to the RBI for classification of companies into financial and non-financial.

- v) Another issue relates to classifying each of the sub-sectors in the financial and the non-financial corporate sectors into public, national private and foreign controlled corporations. In this regard, as already mentioned, Form MGT-7 provides ownership pattern of shareholding by promoters and others, which may be used for identification of public/ national private sector companies. Further, Form AOC-4 submitted by each company to the MCA contains information on percentage shares held by foreign holding companies, which may be used for identification of foreign controlled companies. The Committee recommends that the information contained in Form MGT-7 and Form AOC-4 combined may be used for classifying companies as public, private and foreign controlled. As regards the banks, this information is readily available. The identification of foreign controlled MFs /Insurance /Pension Funds can be done by the respective regulator and they may furnish data for each segment separately. Use of private databases may also be considered.
- vi) Information on employees' stock options issued during a year are collected by the MCA from companies in Form AOC-4/ MGT-7. The Committee recommends that the same may be used for FoF compilation.
- vii) As can be seen in the Annex 1.5, financial derivatives are included in the list of target instruments by the G20 DGI. In this regard, the WG recommended that nature of data available with CCIL and SEBI with regard to OTC and exchange-traded derivative transactions, respectively, may be examined from the view point of incorporating the same in the FoF Accounts (Ref. S.No.50, Table 2 in Chapter 2). The matter may be pursued vigorously.
- viii) While submission of Forms AOC-4 and MGT-7 is mandatory, still there is gross non-reporting. It is understood that MCA has also introduced a penalty scheme for non-filing. The Committee recommends that the MCA may

- consider introducing further deterrent so that timely submission of these Forms by all active companies are ensured.
- ix) SNA 2008 prescribes bifurcation of loans, debt securities and investments into short-term (up to one year) and long-term. It is understood that it may be possible for banks and also the NBFCs to furnish this information, if called for. As regards the non-financial/ financial corporations, the balance sheet structure presently prescribed by the MCA provides these details and they are being published in the Company Finances Studies of the RBI (DSIM). This may be used in FoF compilation of these sectors. Further, implementation of Ind-AS<sup>7</sup> norms will ensure disclosure of short-term and long-term borrowings even for banks and other financial institutions.
  - x) As regards the data in respect of WUAs, Farmer Producer Organisations (FPOs) and MSMEs, to the extent, these organisations are registered under the Companies Act, MCA may have information. However, identification of such institutions in the MCA database is a challenge, as there is no NIC code to identify these organisations. The Committee suggests that till such time, wherever NABARD or its subsidiaries have promoted or financed such institutions, the information can be obtained for making estimations and projections.
  - xi) Presently, the FoF accounts in India do not capture data from financial auxiliaries (like loan/insurance brokers and portfolio managers) and 'captive financial institutions and money lenders'. As regards the loan/ insurance brokers and portfolio managers, they mainly offer fee-based services, and as such, their exclusion may not cause any serious problem. Further, the captive financial institutions may be included in the financial sector (mostly NBFCs), though their separate identification is not possible at present. As majority of the money lenders belong to the unorganised sector, capturing data from them may not be feasible.

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<sup>7</sup> Indian Accounting Standard (abbreviated as Ind-AS) are issued by the Ministry of Corporate Affairs (MCA), as per the recommendations of National Advisory Committee on Accounting Standards (NACAS) and under the supervision of Accounting Standards Board (ASB), for adoption by companies in India.

- xii) The Committee also suggested that data on alternative investment funds (AIFs) may be included in the sub-sector ‘other financial corporations’. AIF is a privately pooled investment vehicle which collects funds from sophisticated investors, whether domestic or foreign, for investing it in accordance with a defined investment policy for the benefit of its investors. The broad ambit of AIF includes different sub-categories like venture capital funds, SME funds, social venture funds, infrastructure funds, etc. SEBI may collect data on these entities and provide to the FoF data compilers.
- xiii) Notwithstanding the improved coverage of non-financial corporations, especially the private limited companies in recent years, the aggregate picture is obtained using the blow-up method based on PUC. However, there are severe limitations to this exercise as: (a) the sample is small and not random (based on available companies’ data) and (b) all variables may not be equally related to the size of the PUC. Further, timely availability of data is another issue. Considering the above, the Committee suggests an alternative approach for compiling data in respect of the private corporate business sector (described separately in section IV below). For exploratory purpose, the exercise was restricted to companies in the manufacturing sector. However, it may easily be extended to the entire financial/ non-financial sector.
- xiv) SNA 2008 recommends bifurcation of deposits into transferrable and other deposits. While the definition of transferrable deposits may not strictly apply, bifurcation of bank deposits into ‘current and savings’ and ‘term’ may be shown.
- xv) The WG recommended preparation of FoF account for money market mutual funds (MMMFs) and non-money market MFs (NMMMFs) separately. This has been attempted in a limited way while releasing data for 2015-16. Going forward, investment of all the economic sectors in MMMFs and NMMMFs may be captured respectively.

**d) Insurance Sector Data**

The HLC suggested that the RBI may approach the IRDA to provide combined balance sheet for all insurance institutions – public and private - as per the FoF format. In response, the IRDA pointed out a few issues with the FoF format and also mentioned that many of the details required in this regard are not captured by them. IRDA suggested that the format used in their Annual Report may be adopted by the RBI. This will bring consistency and uniformity in the reporting. The Committee recommends that IRDA should provide the data on life and non-life insurance (both – public and private) to the RBI in a mutually agreed format. In respect of data gaps, if any, required for compilation of FoF, the same may be captured by the IRDA. In particular, IRDA should provide an estimate of loans and advances to households from the insurance sector (both public and private) regularly to the RBI. Further, the RBI should use the actual data on non-life insurance as received from the IRDA, instead of using the ratio derived from life insurance sector data.

**e) Data on Pension and Provident Funds**

Retirement funds are a prominent financial asset of households. Data on these funds are sourced from the budget documents of the central and state governments, annual reports of the EPFO<sup>8</sup>, returns received from pension and provident funds set up by some statutory organisations, and the PFRDA. The PFRDA is collecting data on number of subscribers and corpus for each category of subscribers under the NPS at monthly intervals and households' saving in the NPS is collected by the RBI from the PFRDA on a regular basis.

**f) Government Sector Data**

- i) HLC recommended that the ownership pattern of Government securities (consolidated for all levels of Government), comprising six categories, viz., 1) government , 2) banks, 3) financial sector other than banks, 4) non-service sector (corporates, firms and societies), 5) external sector and 6) households

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<sup>8</sup> Data from EPFO comes with significant lags, latest available annual report of EPFO pertains to FY 2015-16.

sector, may be prepared by the concerned Department of RBI. Table 122 (Ownership of Central and State Government Securities) of the Handbook of Statistics of the Indian Economy, 2016-17 shows holdings of government securities as per eleven categories, viz., (i) RBI (own account) (ii) scheduled commercial banks (iii) cooperative banks (iv) primary dealers (v) insurance companies (vi) financial institutions (vii) mutual funds (viii) provident funds (ix) corporates (x) foreign institutional investors and (xi) others. The Committee noted that ‘others’ also include sectors other than the households, such as state/ local/ quasi governments holding securities of central governments and trusts. The Committee recommends that the data on various components of ‘others’ should be clubbed along with the respective sectors and data on households sector be separately carved out, for FoF compilation.

- ii) Inclusion of LBs under the GG can strengthen the FoF accounts. Chapter 4 discusses issues relating to local government finances in detail.

**g) Data on Rest of the World**

The FoF with the RoW sector is compiled on the basis of BoP data, which is mainly based on transaction level data for a given period. It does not match with difference in stock data captured in the International Investment Position (IIP), which also incorporates valuation changes. The difference in the two figures is quite large. The Committee suggests that while BoP data may continue to be used for FoF purpose, both sets of data (IIP and BoP) may be presented separately for reference purpose.

**h) Others**

- i) Feasibility of compiling and publishing separately the ‘valuation account’ and the ‘other changes in volume account’ may be explored. Further, generation of “Reconciliation Table” to record discrepancy between the stocks and the flows may also be examined.
- ii) Priority may be accorded to fulfil these requirements which are included in Tier-1 (i.e. targeted/ minimum) in the template prepared by the G20 DGI.

## **Section IV: Compilation of FoF for Private Corporate Business Sector – An Exploratory Analysis**

3.5 A major issue considered by the Committee was improvement in timeliness in release of FoF statistics. Currently, India's FoF (annual) data are released with a lag of around 17 months, as against the recommended time lag of 9 months. In this regard, a major handicap is the timeline prescribed under the Companies Act for finalisation of audited annual accounts. Corporates are allowed to take 6 months for preparation of audited annual accounts, and in cases of genuine difficulties, they may seek further extensions. Thus, reasonable amount of data are received only after a lag of 9 months. Thereafter, checking of data consistencies and aggregation take some more time. The Committee explored the possibility of estimating the required data based on audited annual accounts of early reporting companies.

3.6 Another issue considered by the Committee is the present methodology for compilation of national accounts. Aggregated data on audited annual accounts of available (i.e. sample) non-Government (financial/ non-financial) companies are blown up using a factor based on the PUC. The same methodology is used for compilation of FoF accounts also. As the method has serious limitations<sup>9</sup>, the Committee explored two alternative methods, namely, (a) growth rate method, and (b) regression method, for estimation of various variables. For an exploratory exercise, data on manufacturing sector were only considered.

### **IV.1 Framework of the Analysis**

**3.7 Identification of Early Reporting Companies:** Based on date of submission of audited annual accounts data to the MCA in the last few years, the Committee felt that the accounts received up to October (T+7 months) may be considered as early reporting companies. Data of these companies may be used as sample data for estimating the required variables for FoF and financial accounts.

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<sup>9</sup> See Sapre, Amey and Sinha, Pramod (2016) "Some areas of concern about Indian manufacturing sector GDP estimation", NIPFP Working Paper, No. 172, August, 2016.

**3.8 Estimation of Variables:** As discussed above, estimation of the required variables for preparation of FoF for manufacturing companies was based on two alternative methods. For each method, aggregates published in the company finances studies of the RBI for the year (for which estimation is required) were considered as the final estimate. The exercise was repeated for two years, namely, 2014-15 and 2015-16.

**3.9 Growth Rate Method:** For obtaining growth rates, two years' data are required. Therefore, availability of previous year's data of the early reporting companies (as per date of submission in the current year) was checked from the company finances studies. Companies for which data in respect of both the years were available, constituted the sample for estimation. Growth rate for each item, required for estimation, was obtained for the sample companies and the same growth rate was applied to the previous year's final estimate. The figure so obtained is considered as an early estimate for the current year.

**3.10 Regression Method:** In this method, a panel regression was run using all companies' data available till date (from 2011-12 onwards) including the early reporting companies for the current year. For each dependent variable (required for estimation), same set of explanatory variables, namely, type of the company (public/ private limited), its listed/ unlisted status, industry of operation (based on 2 digit NIC-code) and geography (location of the regd. office) as available from the unique CIN; the paid-up capital and age of the company were considered along with an index of macro-economic parameter (growth in the index of industrial production for the manufacturing sector) (details are in Annex 3.2 A). Based on this regression model, required data for all the non-reporting companies (those reported data in any of the previous years) was estimated.

#### **IV.2 Estimates of Select Variables for 2014-15 and 2015-16**

3.11 Using the above methods, select balance sheet variables (deposits; bonds/ debentures; short-term and long-term borrowings on the liabilities side; cash and cash equivalent; investment in Government and trust securities, in bonds/ debentures, in equity instruments and in mutual funds; and loans and advances on the assets side) were estimated for the years 2014-15 and 2015-16 (Annex 3.2 B and Annex 3.2 C).

3.12 Differences (in percentage terms) in the estimates for both the years are given in Tables 1 and 2 below. It may be observed that, the range of errors based on panel regression method was the lowest followed by the growth rate method. Estimates based on PUC blow-up method had maximum range of errors. So, the Committee found merit in using the regression technique for estimating the population figures from the available information.

<b>Table1: Estimation of select balance sheet variables of 64,506 companies in manufacturing sector for 2014-15 using 19,361 early reporting companies data</b>							
Variables	Actual CFD Study Population Figures	Estimates Using PUC Blow-up Method		Estimates Using Growth Rates Method		Estimates Using Panel Regression Method	
		Estimate	Error (%)	Estimate	Error (%)	Estimate	Error (%)
<b>Liability</b>							
Deposits	49,837	16,901	-66.1	22,981	-53.9	43,745	-12.2
Bond/ Debenture	5,62,556	2,63,570	-53.1	3,31,854	-41.0	5,79,176	3.0
Long Term Loans	38,82,435	20,47,226	-47.3	41,51,791	6.9	36,12,381	-7.0
Short Term Loans	23,90,453	11,86,011	-50.4	29,28,905	22.5	18,22,376	-23.8
<b>Assets</b>							
Cash and cash equivalent	17,02,927	10,76,396	-36.8	18,40,255	8.1	14,88,743	-12.6
Investment in Govt./ Trust Securities	35,612	2,072	-94.2	58,686	64.8	39,578	11.1
Investment in Bond/ Debenture	2,48,847	4,81,955	93.7	2,36,541	-4.9	2,18,446	-12.2
Investment in Equity Instrument/Shares	25,83,147	79,65,206	208.4	18,27,190	-29.3	18,30,743	-29.1
Investment in Mutual funds	14,44,772	16,72,378	15.8	14,38,385	-0.4	17,70,904	22.6
Loans and Advances	29,23,560	33,15,495	13.4	27,75,360	-5.1	26,77,979	-8.4
<b>Range of Errors (Spread)</b>		<b>-94.2 to 208.4 (302.5)</b>		<b>-53.9 to 64.8 (118.7)</b>		<b>-29.1 to 22.6 (51.7)</b>	

**Table2: Estimation of select balance sheet variables of 80,374 companies in manufacturing sector for 2015-16 using 24,359 early reporting companies data**

(Amount in Rs. Million; Errors in %)

Variables	Actual CFD Study Population Figures	Estimates Using PUC Blow-up Method		Estimates Using Growth Rates Method		Estimates Using Panel Regression Method	
		Estimate	Error (%)	Estimate	Error (%)	Estimate	Error (%)
<b>Liability</b>							
Deposits	98,816	51,553	-47.8	1,41,159	42.9	94,344	-4.5
Bond/ Debenture	8,05,201	5,81,076	-27.8	10,58,766	31.5	7,30,811	-9.2
Long Term Loans	41,44,892	34,08,545	-17.8	43,56,943	5.1	39,71,663	-4.2
Short Term Loans	32,37,505	22,20,127	-31.4	32,40,753	0.1	30,06,518	-7.1
<b>Assets</b>							
Cash and cash equivalent	14,56,267	21,22,218	45.7	13,62,928	-6.4	13,38,641	-8.1
Investment in Govt./ Trust Securities	2,62,350	51,592	-80.3	2,06,597	-21.3	50,123	-80.9
Investment in Bond/ Debenture	1,98,860	6,24,519	214.0	1,63,952	-17.6	1,58,750	-20.2
Investment in Equity Instrument/Shares	9,66,902	73,29,380	658.0	1,48,279	-84.7	9,44,852	-2.3
Investment in Mutual funds	11,05,936	25,11,474	127.1	12,09,285	9.3	8,13,444	-26.4
Loans and Advances	30,93,785	42,81,592	38.4	30,74,999	-0.6	27,43,563	-11.3
<b>Range of Errors (Spread)</b>		<b>-80.3 to 658.0 (738.4)</b>		<b>-84.7 to 42.9 (127.5)</b>		<b>-80.9 to -2.3 (78.6)</b>	

#### IV.3 Scope of Further Work

3.13 The regression exercise conducted by the Committee is very preliminary and there is enough scope to extend the work. For example, industry of operation (2-digit level NIC) was considered as a regressor but most of the industry dummies were insignificant<sup>10</sup>. Also, in addition to the growth parameter, other business variables, such as, interest rates and capital market condition can also be considered as regressors. Further, for estimating

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<sup>10</sup>The present exercise used random effect model but reducing the dimension of data will enable fixed effect estimation.



required parameters for the entire private corporate sector, apart from manufacturing sector companies, the modelling exercise needs to be repeated for other companies [operating under primary (agriculture and mining) and tertiary sector (services companies including financial sector)]. For these other companies, IIP may not be a suitable macroeconomic variable. Even for the manufacturing sector, for some of the variables, IIP growth was not significant. Thus, an alternative can be to use GDP growth in place of the IIP.

3.14 It is also observed that for variables, which assumes large values, growth rate estimates are quite stable. Further, in case of variables which assumes medium to small values, regression estimates are more stable. In such cases, a judgement may be used regarding appropriate method of estimation for each line item (i.e. variable of interest). Alternatively, model averaging may be resorted to either with equal weights to both the estimates, or with the weights inversely proportional to the errors of estimates.

3.15 The above framework can be extended to estimate all the balance sheet variables. In such a case, an additional problem may arise as total assets and liabilities may not match. However, keeping estimates of total liabilities/ assets intact, other variables' estimates may be considered proportionately to force the accounting identities in these estimates.

3.16 The Committee recommends that the data compilers (both of national accounts as well as FoF) may further explore appropriate statistical methods, such as, growth rates or regression models to estimate the balance sheet variables, in order to reduce the shortcoming/ errors in present PUC based blow-up method.

#### **Section V: Statistical Discrepancies in the RBI and the CSO Estimates of Financial Accounts**

3.17 As the FoF accounts and the financial accounts are prepared by the RBI and the CSO independently some discrepancies in the two data sets are unavoidable. Statistical discrepancies are recognised by the SNA 2008 and Manual of Monetary and Financial

Statistics Compilation (MMFSC)<sup>11</sup> as well. Placed below are recommendations of MMFSC relating to statistical discrepancies (*para 8.47 – 8.49*):

*"Statistical discrepancies arise when two data sets provide different numerical values for the same data category. In financial statistics, there is typically a statistical discrepancy between NL/ NB derived from the capital account and net financial investment (NFI) derived from the financial account, which conceptually should equal. From the capital account, the identity for NL/ NB is:*

$$/ \equiv + -$$

*From the financial account, the identity for net financial investment is:*

$$\equiv -$$

*No clear international consensus on the treatment of this discrepancy exists. One approach is to keep the discrepancy through the use of a residual (referred to as a balancing item). This approach assists users in gauging the magnitude of errors and the overall quality of the data. Alternatively, the discrepancy can be removed by distributing the discrepancy across one or more items in the capital account, the financial account, or both—treating the discrepancy as other changes in the volume of assets (OCVA). The advantage of removing discrepancies is that it provides "balanced" accounts, and ambiguity is eliminated for the users. Consistent with the 2008 SNA, it is recommended to provide users with the recorded data for NL/NB and NFI, and not distribute the discrepancy, while indicating which data set is more reliable.*

*For compilers, data on the discrepancies provide valuable information for identifying areas that need improvement in data collection, estimation, and compilation system."*

3.18 In order to resolve statistical discrepancy between CSO data and RBI data, a meeting of the CSO and the RBI officials was held. It was found that differences in households and the rest of world sector were not significant. It was also noticed that differences are mainly located in GG sector, financial corporation sector, and non-financial corporation sector. After discussions, it was decided to sort out the sources and causes of discrepancies in GG sector and financial corporations sector for which relatively

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<sup>11</sup> Manual of Monetary and Financial Statistics Compilation by the IMF 2016.

firmer data are available as compared with the private non-financial corporate sector. This was to be done by using the same source of data for compilation as detailed below:

- (i) **Financial Corporation Sector:** It was observed that there is a sizable mismatch between FoF and Financial Accounts in ‘currency and deposits’, primarily on account of mismatch in Non-Banking Financial Institutions (NBFIIs) data. Data for NBFIIs in FoF are sourced from the Department of Non-banking Supervision, RBI while in financial account, it is prepared from MCA database. As this was a major difference, it was decided that the RBI would supply the list of NBFCs to the CSO after entering CIN numbers against each NBFC and then CSO would compare it with their list and supply that to RBI so that the sample set is made identical with mutual consultations. Another reason for a significant difference might be on account of inclusion of unorganised financial entities like private money lenders and Insurance agents under financial corporations by the CSO, while the RBI excludes this sector for the FoF.
- (ii) **General Government Sector:** The GG sector comprises of the central government, state governments and LBs. However differences arise on account of the following:
- **Data Sources:** The CSO compiles data for GG sector accounts from the detailed analysis of Demand for grants (budget documents), Finance accounts and Annual Financial Statements of central and state governments. CSO follows economic and purpose classification of transactions as recommended by SNA which is called COFOG (Classification of Functions of Government). On the other hand, RBI compiles data for this sector on the basis of receipt budgets of the Union Government and RBI’s report on ‘State Finances: A Study of Budgets’. It was decided that RBI would supply instrument-wise source of information to the CSO.
  - **Classification:** There are two differences in the classification of instruments, a) treatment of external debt: while it was shown as debt

securities by the CSO, the RBI classifies it as ‘loans and borrowings’<sup>12</sup>, and b) treatment of provident funds: RBI accounts it under ‘insurance, pension and provident funds’ on liability side of the GG sector account while CSO accounts it under ‘debt securities’. It was decided that the CSO may consider allocating government employees provident fund under the head ‘insurance, pension and provident funds’ in the liability statement of the GG sector. Regarding external debt, the Committee recommends that it should be treated as ‘Loans and Advances’.

- **Use of Current vs. Historical Exchange Rate for Valuation of External Liabilities:** In FoF accounts, the RBI estimates external liabilities at current exchange rate, while in financial accounts, CSO uses historical exchange rate. In the sequence of accounts compiled by CSO, balancing items are derived as a flow from previous account. Accordingly, in the capital account the NL and NB are derived from savings estimates which is a balancing item in the use of income accounts which is based on detailed budget analysis. The net balance of the financial account is equal in magnitude but with opposite sign, to the balancing item of the capital account. Therefore, to maintain consistency, the NL and NB in the finance accounts are also valued as in the other accounts.
- **Data of Local Governments:** Another reason for the difference is non-inclusion of LBs and autonomous institutions by the RBI in the FoF account. The CSO informed that they collect data on LBs from 14 states for estimation of GVA and use a blow up factor based on grants received by the LBs from the States. It was informed by CSO that at present information collected is only for compiling GVA and GFCF estimates and information pertaining to finances of LBs is not collected.

3.19 It was discussed that CSO is using the data on quasi corporations for compilation of the national accounts statistics. However, in the absence of sectoral break-down, these

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<sup>12</sup> The RBI accounts it as ‘loans and borrowings’ as they are non-negotiable in nature.

could not be included in the FoF accounts. As such, the difference on account of this sector may not be reconciled.

3.20 In the external transaction account of CSO though DGCIS figure is taken for merchandise trade, difference between RBI and DGCIS figure is shown as 'adjustment of merchandise exports/ imports to change of ownership basis' to maintain the overall CAD as published by RBI.

3.21 From the above discussions, it can be inferred that due to several practical problems, the two estimates will not be fully reconciled. However, the Committee suggests that the differences on account of data sources and their cut-off dates or otherwise may be reconciled to the extent possible. For this purpose, the CSO and the RBI may exchange their notes before release of these data. Further, wherever, it is not possible to reconcile the differences (say, on account of valuation requirements for matching identities in the sequence of accounts), it may be stated upfront in the publications with complete transparency. It was also suggested that methodological documents for preparation of the FoF and the national accounts may also cover these aspects.

## **Section VI: Quarterly Compilation of FoF**

3.22 Annual FoF Accounts are important for analysing structural issues in an economy. However, in its present format, it provides little guidance for framing of monetary policy, or strengthening the financial stability framework. Sectoral data on a quarterly basis help in better assessment of macroeconomic conditions by identifying the sectoral linkages, spill-overs, and vulnerabilities, as also tracing the transmission of potential shocks of one sector/region to others in timely manner and support monetary and macro-prudential policies provided they are available with a reasonable lag.

3.23 The DGI launched by the G-20 countries post the 2008 crisis, endorsed the proposal to "develop a strategy to promote the compilation and dissemination of the balance sheet approach (BSA), FoF, and sectoral data more generally" (Recommendation #15). In the second phase of the DGI (DGI-II) launched in 2016, it was

emphasised to “*...compile and disseminate, on a quarterly basis ..., sectoral accounts flows and balance sheet data, based on the internationally agreed template, including data for the other (non-bank) financial corporations sector, and develop from-whom to-whom matrices for both transactions and stocks to support balance sheet analysis*” (Recommendation #8).

3.24 Furthermore, countries adhering to the Special Data Dissemination Standard (SDDS) Plus<sup>13</sup> are expected to disseminate on a quarterly basis, a minimum set of internationally comparable data on sectoral balance sheets, with a focus on the sub-sector details of the financial corporations.

3.25 Most G-20 economies have quite concrete plans to compile, on a regular basis, data according to the template, and/or fill remaining data gaps. Since India is a member of the G-20, the WG had also suggested that the “*RBI may examine the possibility of compiling and publishing the FoF accounts on a quarterly basis beginning with the financial sector*”.

## **VI.1 Methodology**

3.26 The Committee recommends that quarterly FoF accounts may be prepared following the same methodology used in compilation of annual FoF Accounts to the extent feasible. The Committee also looked into the data issues which are described in next sub-section.

## **VI.2 Data Issues**

3.27 Data for FoF accounts – mostly, the balance sheets - are available on yearly basis with long time lag. The committee looked at alternative sources of data for quarterly FoF accounts. It observed that data on majority of items in financial sector and some data on General Government and RoW are available at quarterly frequency as detailed below.

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<sup>13</sup>The Special Data Dissemination Standard Plus (SDDS Plus) was established in 2012 and goes beyond the focus of the SDDS by putting an emphasis on countries that have systematically important financial sectors that are integral to the working of the international monetary system. All SDDS subscribers can also, and are encouraged to, adhere to the SDDS Plus.

- a) **Data on Financial Sector:** In respect of the financial sector, quarterly consolidated data should be available with the respective regulator/ supervisor. For example, data for commercial banks with RBI (DBS); co-operative banks with RBI (DCBS); deposit taking NBFCs and NBFC-ND-SI (covering large NBFCs) with RBI(DNBS); life and non-life insurance sector with the IRDA; NPS and some other select pension schemes with the PFRDA. Quarterly data on mutual funds can be explored with the SEBI. While the EPFO releases monthly data on PF subscriptions, details of investments at quarterly frequency as required for FoF may also be obtained from them.
- b) For any other sub-sector, the Committee recommends that quarterly data may be estimated/ projected/ extrapolated from the annual data using appropriate benchmarks.
- c) **Quarterly Data of the General Government Sector:** Main source of information for compilation of annual FoF is budget documents of the Union and State governments, which are available on an annual frequency only. The Committee desires that data compilers may look at the monthly budget reviews of the Central Government to find out availability of data required for FoF estimates. Further, data on central government securities/ state development loan as available with RBI (IDMD) may provide the quantum of Government borrowings.
- d) **Household Sector:** The RBI has released quarterly estimates of financial assets and liabilities of the household sector, based on information available in the financial statements of counterparty sector in March 2018 issue of the RBI Bulletin.
- e) **Non-financial Private/ Public Corporations:** At present, we do not have any quarterly balance sheet data of non-financial corporations. However, as per the SEBI guidelines, the listed companies are required to submit to the recognised stock exchanges a half yearly statement of assets and liabilities within 45 days from the end of the half year. The Committee recommends that the SEBI may prescribe submission of this data on a quarterly frequency.
- f) **Rest of the World:** For the RoW, major data source is the BoP statistics and the international investment position, which are available on quarterly basis.

3.28 From the above, it may be observed that balance sheet data for most of the sub-sectors of the financial sector are available on a quarterly basis and using the same as a mirror image, major portion of the financial flows of other sectors/ sub-sectors can be estimated. The Committee further observed that as per latest FoF accounts for 2015-16, the financial sector contributes the most (36.0 per cent) in total source of funds, followed by non-financial corporations (34.2 per cent), general government (19.4 per cent), households (7.3 per cent) and RoW (3.1 per cent). The Committee, therefore, recommended that Quarterly FoF accounts may be attempted immediately for the financial sector. Further, though the study on household sector as mentioned above has some limitations, it serves as a precursor towards compilation of quarterly FoF for the household sector. The remaining sectors (Government and non-financial corporations) may be put under the residual sector till the time actual data are made available. Wherever required, missing data on sectors/ instruments may be estimated/ projected/ benchmarked. The quarterly FoF may be compiled in abridged form and called provisional estimates. Subsequently, once quarterly data becomes available from respective regulators/ data sources, the compilation methodologies may be revised.

### **VI.3 Discrepancy in Quarterly and Annual Data:**

3.29 Due to various reasons, *viz.*, differences in reporting dates and quarter-end dates, incomplete coverage, estimation technique etc., quarterly data may not add up to annual data, which is sourced from the annual reports. The Committee recommends that the statistical discrepancy arising on account of the quarterly and annual accounts may be adjusted at the time of compilation of annual FoF accounts.

## **Section VII: Strengthening of Data Collection System (for Macro-micro Linkages) and Data Dissemination**

3.30 The mandate of the Committee extends beyond suggesting measures to implement the remaining provisions of SNA 2008 framework for compilation of the FoF accounts of India. It is required to look into the quality of the collected data and the derived estimates and suggest measures to establish the data integrity with necessary audit trails. The Committee is also expected to suggest ways to make the FoF estimates available at

disaggregated level which can provide better insight to the policy makers. Deliberations of the Committee in this regard are reported below.

### **VII.1 Additional Fields in the Existing Databases**

3.31 As per the recommendations of the HLC, most of the regulators are providing consolidated data for the entities regulated by them for compilation of the FoF accounts. These data are primarily based on the audited annual accounts prepared by the respective entities. While the aggregate position of items of assets and liabilities published therein are matched with the books of accounts maintained by them, further disaggregates, say details of the instrument holders as required for the FoF are culled out separately. In the absence of a well developed system, veracity of such data can always be questioned.

3.32 In this context, the Committee noted that with significant improvement in Information Technology, most of the institutional agencies have moved from manual record keeping system to a digitised one. The Committee envisaged creation of a system where all transaction level data can be stored with proper identifiers so that the aggregates as per required dimensions can be directly built-up from the same. This will ensure complete consistency between the macro and the micro data. To start with unique identification of the instrument holder along with the location details are sought to be captured. The Committee noted that in respect of SCBs, the Basic Statistical Returns (BSR) system prescribed by the RBI captures locational details of the borrowers and the depositors up to the village/ town level and has recently created a framework for capturing the identification details of the borrowers. The Committee suggests that all the regulators should incorporate these fields in their databases, wherever relevant. As regards the unique identifiers, Aadhar and PAN for Individuals, CIN for Corporates registered with MCA, legal entity identifier (LEI) for foreign institutions and Udyog Aadhar for enterprises registered with the Ministry of MSME may be used across databases, or similar codes as given by the regulators/ authorised agencies. While capturing locational details, all database should have separate fields for 4 levels (Country, State, District, Taluka and Village/ Town) consistent with the Census structure. It will enable GIS based analysis, which will enable policy makers to discover the region specific linkages among various

sectors (*viz.*, real sector, financial sector, fiscal sector, etc.) and will ensure optimal productive allocation of resources at desired level of geographies.

## **VII.2 Integrated Data Warehouse Networks**

3.33 The Committee was of the view that all data compilers/ regulators may follow dimensional data model in their own data warehouse and maintain required dimensions for classification of statistics into economic (institutional) sector, and locational details up to village/ town level as mentioned above. In addition, if the instrument holder is engaged in some economic activity, the economic activity classification code as per NIC 2008 may also be captured. Use of dimensional data model would enable generating aggregated data at the desired combinations of dimensions with in-built consistency.

3.34 The above data warehouses may also follow good data governance architecture, maintain appropriate masters and should be capable of generating well defined audit trails with proper explanations in the metadata. The above data warehouses may then be integrated/ linked with each other. However, it would require aligning of data definitions (e.g., rural, etc.) across the information systems.

## **VII.3 Strengthening of Statistics on Institutional Sectors with Higher Frequency**

3.35 In view of the above, the Committee suggests specific mandate for each of the sectors as follows:

- **Corporate Sector:** Ministry of Corporate Affairs (MCA) through their MCA21 system should maintain and be able to provide balance sheet items, compulsory disclosures and also the ‘sources and uses of funds’ for each company being reported to them. The balance sheets generally describe instruments on liabilities and assets sides. However, details of instrument holders is available only for some instruments, such as borrowings and investments. Similar details in respect of other financial instruments, such as equity, deposits (on assets as well as on liabilities side), accounts receivable/ payable, etc. are also required. In respect of the companies which do not come under the purview of MCA, MOSPI may do surveys for collecting the required data.

- **Government Sector:** Committee on Fiscal Sector Statistics is expected to suggest ways of compiling data pertaining to Central/ State/ Local Governments' expenses including the various schemes launched by these Governments with the granularity at the district level. However, details of economic sector holding the Government securities, or contributing in financial instruments of the Government's balance sheet are equally important.

Data collection on **RLBs** through Panchayati Raj System needs to be strengthened. If required, it may be re-looked from scratch, so that it fulfil all administrative, fiscal, regulatory/ supervisory (audit) and statistical requirements. It should also be integrated with data requirements from **ULBs**.

- **Financial Sector:** Being the most important segment for FoF compilation, each financial sector regulator should maintain homogeneous set of data.
  - **Mutual Funds:** Security and Exchange Board of India (SEBI) may devise a system which would enable them to provide details of holdings by institutional categories (individuals, corporate, Government, etc.), in various types of mutual funds scheme (money market/ investment funds) and geographical location of investors.
  - **Equity Capital and Bond Holdings:** Similar system may be developed by the SEBI to provide data on stock (shares) holdings and corporate bonds with the above dimensions for listed agencies. Such data may be captured by the SEBI through stock exchanges, depository corporations, share registrars and transfer agents (RTAs), etc.
  - **Insurance Corporations:** LIC, which have a substantial market share in life insurance products, also maintains policy holders' details in their data warehouse environment. They need to geo-code the location of policy holders/ service agents as described above (if not done already) so as to generate data on subscriptions received from policy holders and payments made to the agencies for their services, scheme-wise (pension, ULIP, general, etc.) and geography-wise with desired granularities. Similarly, other public sector general insurance companies should also be able to

provide such data from their system. IRDA may have a data warehouse for collecting and maintaining the unit level data with details on scheme-type, institutional category and geographical location of policy holders in respect of public/ private insurance companies.

- **Data on Scheduled Commercial Banks, Urban Cooperative Banks and Deposit Taking NBFCs:** RBI, through BSR Surveys, collects stock figures (as on date) of deposits/ credit with scheduled commercial banks, which provide details at granularities of institutional/ economic sectors and geographies up to district level. However, in case of urban cooperative banks and NBFCs, it collects only aggregated information. In case of rural co-operatives as well, sectoral details of assets and liabilities are not available. Therefore, possibilities to conduct annual surveys in line with BSR surveys for collecting data from NBFCs and cooperative institutions may be explored by the RBI (DNBS) and the NABARD.
- **Data on RRBs, Rural Cooperative Banks, PACS, PACARDBs, and SACARDBs:** NABARD may create a data warehouse for maintaining granular data on financial operations of the entities being supervised/ regulated by them. Similarly, each state Government may create new database for cooperative credit societies as highlighted in one of the previous section.
- **Household sector:** Some of the micro level data for this sector may be available from financial sector regulators, e.g., deposits/ credit of SCBs from the RBI; mutual funds, stocks and debentures holdings data from SEBI, investments in insurance products from LIC/ IRDA, etc. These data may be used to calculate net changes in liabilities and assets of the households.

#### **VII.4 Other Recommendations**

- 3.36      i) In India, the audited accounts are generally available with a lag of 6-9 months and scrutiny of the same can take up to another 3 months. Thus, 12 months can be considered as reasonable time for release of annual FoF data.

However, some of the institutions/ regulators make available unaudited data early, which can be used in preparing provisional estimates. Provisional annual FoF accounts may be released within 9 months from the reference date.

- ii) As availability of data from some sectors is an issue, the Committee recommends releasing provisional/ revised estimates of FoF along with the methodologies (including use of estimations/ projections) for compiling such estimates from the primary sources of data.
- iii) Provisional quarterly FoF may be released within 4 months from the reference dates (in line with ECB<sup>14</sup>), using estimations in case of non-availability of data.
- iv) Improvement in the format for release of FoF data can be thought of in line with international best practices - while the annual data could be more detailed, the quarterly data could be abridged.
- v) Considering the significant international attention being paid to the implementation of agreed data templates through outreach, technical assistance, and training, the compilers from the National Account Analysis Division of DEPR, RBI and CSO, MoSPI may be given adequate training and exposure.

3.37 To address the issue of periodic audit, the Committee opined that as the FoF is derived from primary accounts of concerned institutions, audit of the primary accounts should be a priority.

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<sup>14</sup> ECB Monthly Bulletin – Euro Area Statistics Methodological Notes  
<http://sdw.ecb.europa.eu/browse.do?node=9691132#tabs-5>

**Annex 3.1: Flow of Fund Accounts of the Indian Economy: Sources of Data**

Sector and sub-sector	Source agency	Source document(s)	Time-line of data availability
<b>1. Non-Financial Corporations</b>			
1.a Public Non-financial Corporations (i) Government Non-departmental commercial undertakings (NDCUs) (ii) Power Companies	Ministry of Heavy Industries and Public Enterprises Respective power utility	Survey of Public Sector Enterprises (PSEs) Performance of State Power Utilities-Annual Publication of Power Finance Corporation	12 months 12 months
1.b Other Non-financial Corporations (i) Public Limited Companies (ii) Private Limited Companies	RBI (DSIM) RBI (DSIM), SEBI and MCA	Annual data furnished by MCA to RBI (DSIM) Annual data furnished by Ministry of Corporate Affairs (MCA) to RBI (DSIM)	12 months 12 months
<b>2. Financial Corporations</b>			
2.a Central Bank	RBI (DGBA, various regional offices)	1. RBI Statement of Affairs 2. Real Time Handbook of Statistics on the Indian Economy ( <a href="http://www.dbie.rbi.org.in">www.dbie.rbi.org.in</a> )	No lag
2.b Deposit-taking corporations, except the central bank			12 months
(i) Commercial Banks	RBI (DSIM)	Statistical Tables relating to Banks in India (from DSIM) Section 42 returns (from DBR/DSIM) Form X returns for RRBs (from DBR)	9 months
(ii) LAB	RBI (DBS)		9 months
(iii) State Cooperative Banks	NABARD/RBI (DCBR)	1. Form IX return 2. Statistical Tables relating to Banks in India	9 months
(iv) District Central Cooperative Banks	NABARD/ RBI (DCBR)	3. Statistical Statements relating to the Cooperative Movement in India, which is available with a time lag.	9 months

<b>Sector and sub-sector</b>	<b>Source agency</b>	<b>Source document(s)</b>	<b>Time-line of data availability</b>
(v) Urban Cooperative Banks	DCBR, RBI		9 months
(vi) NBFC- D	RBI (DNBR and DSIM)		9 months
(vii) HFCs-D	National Housing Bank (NHB)		9 months
(viii) Central Public Sector Financial Corporations	Ministry of Heavy Industries and Public Enterprises	Survey of Public Sector Enterprises	9 months
(ix) Mutual Funds	Securities and Exchange Board of India (SEBI)		No lag
(x) Other financial intermediaries, except insurance corporations and pension funds	Annual Reports of the respective institutions		3 months
(xi) Non-deposit taking Non-Banking Financial Companies	RBI (DNBR)		3 months
(xii) Non-deposit taking Housing Finance Companies	NHB		3 months
(xiii) Insurance Corporations	IRDA	IRDA Annual Report, LIC Annual Report	3 months
(xiv) Pension Funds	PFRDA/MOSPI (CSO)	Respective Provident and Pension Funds	3 months
<b>3. General Government</b>			
3.a Central Government	RBI, DEPR (FAD)	1. Economic and Functional Classification of the Union Budget (EFC) 2. Union Budget documents 3. Union Finance Accounts ( <a href="http://cga.nic.in/">http://cga.nic.in/</a> ) 4. Combined Finance and Revenue Accounts (CFRA) ( <a href="http://cag.gov.in/">http://cag.gov.in/</a> )	Revised estimate figures are available with a lag of 12 months. However, they are subject to change.
3.b State Governments	RBI, DEPR (FAD) and Comptroller and Auditor General (CAG)	1. A Study of State Budgets 2. Combined Finance and Revenue Accounts 3. Finance Accounts of State Governments	Revised estimate figures are available with a lag of 12 months. However, they

*Continued ...*

*Report of the Committee on Financial Sector Statistics, 2018*

Sector and sub-sector	Source agency	Source document(s)	Time-line of data availability
			are subject to change.
<b>4. Households and Non-profit institutions serving households</b>			
<b>5. Rest of the World</b>	RBI, DEPR (DITF) & DSIM	BoP Statistics, External Debt Statistics and International Investment Position of India	3 months

$$\text{Annex 3.2 A: Model Equation}$$

$$= \sum_{i=1}^{n=10} + 1(\cdot) + 2(\cdot) + h(\cdot) + 3(\cdot) + 4(\cdot) + 3(\cdot)$$

Where,

is the dependent variable (as per below table) of interest for ith company at time t

<b>Liability</b>	<b>Assets</b>
Deposits	Cash and cash equivalent
Bond/Debenture	Investment in Govt./Trust Securities
Long Term Loans	Investment in Bond/Debenture
Short Term Loans	Investment in Equity Instrument/Shares
	Investment in Mutual funds
	Loans and Advances

is the residual, is the intercept and ', ' are the regression coefficients for the set of regressors described below.

### Description of Explanatory Variables

(1)  $(\cdot)$  = Paid-up capital of the ith company at time t

(2)  $(\cdot)$  : IP growth of kth industry at time t to which ith company belong  
 (3)  $(\cdot)$  : Age of ith company at time t

(4) $(\cdot)$ = kth Indgroup in the manufacturing sector	Industry Group Name
9	MANUFACTURE OF FOOD PRODUCTS AND BEVERAGES
10	MANUFACTURE OF TOBACCO PRODUCTS
11	MANUFACTURE OF TEXTILES
12	MANUFACTURE OF WEARING APPAREL; DRESSING AND DYEING OF FUR
13	TANNING AND DRESSING OF LEATHER; MANUFACTURE OF LUGGAGE,HANDBAGS SADDLERY, HARNESS AND FOOTWEAR
14	MANUFACTURE OF WOOD AND OF PRODUCTS OF WOOD AND CORK,EXCEPT FURNITURE;MANUFACTURE OF ARTICLES OF STRAW AND PLATING MATERIALS
15	MANUFACTURE OF PAPER AND PAPER PRODUCTS

*Continued ...*

(4) ( ) = kth Indgroup in the manufacturing sector	<b>Industry Group Name</b>
16	PUBLISHING, PRINTING AND REPRODUCTION OF RECORDED MEDIA
17	MANUFACTURE OF COKE, REFINED PETROLEUM PRODUCTS AND NUCLEAR FUEL
18	MANUFACTURE OF CHEMICALS AND CHEMICAL PRODUCTS
19	MANUFACTURE OF RUBBER AND PLASTIC PRODUCTS
20	MANUFACTURE OF OTHER NON-METALLIC MINERAL PRODUCTS
21	MANUFACTURE OF BASIC METALS
22	MANUFACTURE OF FABRICATED METAL PRODUCTS, EXCEPT MACHINERY AND EQUIPMENTS
23	MANUFACTURE OF MACHINERY AND EQUIPMENT N.E.C.
24	MANUFACTURE OF OFFICE, ACCOUNTING AND COMPUTING MACHINERY
25	MANUFACTURE OF ELECTRICAL MACHINERY AND APPARATUS N.E.C.
26	MANUFACTURE OF RADIO, TELEVISION AND COMMUNICATION EQUIPMENT AND APPARATUS
27	MANUFACTURE OF MEDICAL, PRECISION AND OPTICAL INSTRUMENTS, WATCHES AND CLOCKS
28	MANUFACTURE OF MOTOR VEHICLES, TRAILERS AND SEMI-TRAILERS
29	MANUFACTURE OF OTHER TRANSPORT EQUIPMENT
30	MANUFACTURE OF FURNITURE; MANUFACTURING N.E.C.
31	RECYCLING
(5) ( ) = Region to which the company belong	<b>Region Name</b>
1	North
2	East
3	West
4	South
5	Central
6	North East
(6) ( )	= 1 if the ith company is Listed, otherwise 0
(7) ( )	= 1 if the ith company is Public Limited, Otherwise 0

**Annex 3.2 B: Regression Results for the Year 2014-15**

Dependent Variables ->	(A) Liability Items				(B) Asset Items					
Independent Variables ↓	Deposits	Bonds & Debentures	Long Term Loans	Short Term Loans	Cash and Cash Equivalents	Investment in Govt/Trust Securities	Investment in Bond/Debenture	Investment in Equity Instrument / Shares	Investment in Mutual Funds	Loans & Advances
PUC	<b>0.65***</b>	<b>1.65***</b>	<b>2.65***</b>	<b>3.65***</b>	<b>4.65***</b>	<b>5.65***</b>	<b>6.65***</b>	<b>7.65***</b>	<b>8.65***</b>	<b>9.65***</b>
	(0)	(0)	(0.19)	(0.01)	(0.01)	(0)	(0)	(0.01)	(0.01)	(0.01)
<b>For independent variables "IIPGrowth" and "Age" - Coefficients and (Standard Errors) are in thousands of data unit.</b>										
IIPGrowth	4.29	156.36	65.64	-161.62	<b>-780.81**</b>	3.40	1.84	-61.83	200.37	-53.79
	(17.02)	(196.08)	(875.48)	(230.81)	(361.9)	(14.56)	(76.03)	(611.33)	(635.71)	(583.41)
Age	<b>18.90**</b>	69.00	<b>859.65**</b>	*	<b>205.11**</b>	<b>500.09***</b>	<b>21.65***</b>	<b>121.44***</b>	<b>912.65***</b>	<b>1011.37***</b>
	(7.8)	(65.67)	(297.81)	(83.65)	(121.2)	(4.88)	(25.46)	(204.73)	(212.9)	(195.38)
<b>For independent variables "Indgroup", "List", "Type", Region and "Constant" - Coefficients and (Standard Errors) are in millions of data unit.</b>										
<b>Industry Groups</b>										
10	-0.62	-7.88	-48.70	17.30	<b>109.00***</b>	0.91	2.69	7.96	46.80	1.24
	(1.53)	(12.9)	(58.3)	(16.4)	(23.7)	(0.96)	(4.99)	(40.1)	(41.7)	(38.3)
11	0.58	<b>5.89*</b>	<b>46.40***</b>	5.33	2.86	<b>0.65**</b>	<b>3.37**</b>	<b>32.40***</b>	<b>25.70**</b>	<b>24.80**</b>
	(0.42)	(3.58)	(16.2)	(-4.56)	(6.61)	(0.27)	(1.39)	(11.2)	(11.6)	(10.7)
12	0.20	3.72	21.70	-0.33	4.52	0.35	1.54	15.30	14.60	15.50
	(0.52)	(4.38)	(19.9)	(5.58)	(8.09)	(0.33)	(1.7)	(13.7)	(14.2)	(13)
13	-0.18	-0.33	-6.44	-5.59	0.10	-0.04	-0.43	4.77	-2.75	-2.16
	(0.9)	(7.59)	(34.4)	(9.66)	(14)	(0.56)	(2.94)	(23.7)	(24.6)	(22.6)
14	0.28	5.63	23.10	-3.01	-2.02	0.39	1.49	12.70	16.10	11.40
	(0.92)	(7.71)	(35)	(9.82)	(14.2)	(0.57)	(2.99)	(24)	(25)	(22.9)
15	-0.05	-0.08	-1.11	-7.52	-3.44	-0.04	-0.53	-1.42	-3.03	-4.84
	(0.68)	(5.75)	(26.1)	(7.33)	(10.6)	(0.43)	(2.23)	(17.9)	(18.6)	(17.1)
16	0.23	5.79	22.70	-1.36	<b>35.50***</b>	0.38	1.72	22.10	15.50	<b>32.70**</b>

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*Report of the Committee on Financial Sector Statistics, 2018*

Dependent Variables ->	(A) Liability Items				(B) Asset Items					
Independent Variables ↓	Deposits	Bonds & Debentures	Long Term Loans	Short Term Loans	Cash and Cash Equivalents	Investment in Govt/Trust Securities	Investment in Bond/Debenture	Investment in Equity Instrument / Shares	Investment in Mutual Funds	Loans & Advances
	(0.58)	(4.89)	(22.2)	(6.23)	(9.03)	(0.36)	(1.9)	(15.3)	(15.9)	(14.6)
17	-0.57	-8.62	-53.90	0.86	-1.99	-0.83	-4.17	-19.90	-37.80	-31.00
	(0.95)	(7.96)	(36.1)	(10.1)	(14.7)	(0.59)	(3.08)	(24.8)	(25.8)	(23.7)
18	0.06	0.16	-0.61	-3.15	-0.46	-0.01	-0.13	4.37	-0.60	-0.78
	(0.4)	(3.34)	(15.2)	(4.26)	(6.17)	(0.25)	(1.3)	(10.4)	(10.8)	(9.95)
19	0.16	2.20	11.80	-4.11	0.08	0.16	0.53	7.70	5.66	4.49
	(0.49)	(4.12)	(18.7)	(5.25)	(7.61)	(0.31)	(1.6)	(12.9)	(13.4)	(12.3)
20	0.07	0.77	0.09	-2.85	-4.40	-0.07	-0.78	0.75	-4.02	3.63
	(0.62)	(5.24)	(23.8)	(6.68)	(9.68)	(0.39)	(2.03)	(16.3)	(17)	(15.6)
21	-0.04	4.16	-0.12	6.66	-0.39	-0.14	-1.35	-6.78	-5.49	3.20
	(0.44)	(3.73)	(16.9)	(4.74)	(6.89)	(0.28)	(1.45)	(11.6)	(12.1)	(11.1)
22	0.13	0.36	0.03	-4.80	-4.24	-0.02	-0.41	-0.18	-2.32	-0.14
	(0.54)	(4.52)	(20.5)	(5.76)	(8.35)	(0.34)	(1.75)	(14.1)	(14.7)	(13.5)
23	0.00	0.13	-1.74	-6.83	-1.93	0.03	-0.26	1.99	0.49	-0.85
	(0.43)	(3.65)	(16.6)	(4.65)	(6.74)	(0.27)	(1.42)	(11.4)	(11.8)	(10.9)
24	0.08	2.13	86.68	-6.87	11.60	0.18	0.64	9.07	11.20	12.50
	(0.92)	(7.8)	(35.4)	(9.93)	(14.4)	(0.58)	(3.02)	(24.3)	(25.3)	(23.2)
25	<b>1.50***</b>	0.64	-20.60	-3.46	-3.00	-0.39	-1.96	-9.48	-18.90	-13.10
	(0.52)	(4.44)	(20.1)	(5.64)	(8.19)	(0.33)	(1.72)	(13.8)	(14.4)	(13.2)
26	-0.43	-6.32	-29.90	<b>-18.90**</b>	-4.50	-0.46	-3.49	<b>-31.90*</b>	-18.50	-14.30
	(0.74)	(6.22)	(28.2)	(7.92)	(11.5)	(0.46)	(2.41)	(19.4)	(20.2)	(18.5)
27	0.24	4.95	19.20	-3.17	8.05	0.37	1.60	16.00	16.00	15.70
	(0.81)	(6.84)	(31)	(8.71)	(12.6)	(0.51)	(2.65)	(21.3)	(22.2)	(20.3)
28	<b>-2.04***</b>	<b>-28.70***</b>	<b>-162.00***</b>	<b>-22.80***</b>	<b>-22.60**</b>	<b>-2.47***</b>	<b>-11.60***</b>	<b>-73.80***</b>	<b>-114.00***</b>	<b>-74.40***</b>
	(0.73)	(6.16)	(27.9)	(7.84)	(11.4)	(0.46)	(2.39)	(19.2)	(20)	(18.3)

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*Report of the Committee on Financial Sector Statistics, 2018*

Dependent Variables ->	(A) Liability Items					(B) Asset Items					
Independent Variables ↓	Deposits	Bonds & Debentures	Long Term Loans	Short Term Loans	Cash and Cash Equivalents	Investment in Govt/Trust Securities	Investment in Bond/Debenture	Investment in Equity Instrument / Shares	Investment in Mutual Funds	Loans & Advances	
29	-1.16	-12.00	<b>-77.80**</b>	-9.05	-21.10	<b>-1.80***</b>	<b>-8.47***</b>	<b>-58.40**</b>	<b>-78.10***</b>	<b>-55.90**</b>	
	(0.94)	(7.91)	(35.9)	(10.1)	(14.6)	(0.59)	(3.07)	(24.7)	(25.7)	(23.5)	
30	0.65	2.86	11.70	<b>26.10***</b>	<b>27.90***</b>	0.19	0.85	10.70	6.62	12.70	
	(0.57)	(4.82)	(21.9)	(6.13)	(8.9)	(0.36)	(1.87)	(15)	(15.6)	(14.3)	
31	0.30	2.56	16.70	-7.19	1.12	0.39	1.73	14.90	16.60	13.90	
	(2.02)	(17.1)	(77.3)	(21.7)	(31.5)	(1.27)	(6.61)	(53.2)	(55.3)	(50.7)	
Listing	<b>3.54***</b>	<b>61.20***</b>	<b>29.70***</b>	<b>104.00**</b>	<b>*</b>	<b>192.00***</b>	<b>5.25***</b>	<b>27.60***</b>	<b>211.00***</b>	<b>222.00***</b>	<b>271.00***</b>
	(1.12)	(9.68)	(43.8)	(12.2)	(17.9)	(0.72)	(3.75)	(30.2)	(31.4)	(28.8)	
Type	<b>-2.47***</b>	<b>-34.50***</b>	<b>-</b>	<b>173.00**</b>	<b>*</b>	<b>-17.10*</b>	<b>-50.50***</b>	<b>-3.57***</b>	<b>-17.80***</b>	<b>-129.00***</b>	<b>-155.00***</b>
	(0.94)	(8.18)	(37)	(10.3)	(15.1)	(0.61)	(3.17)	(25.5)	(26.5)	(24.3)	
Region											
2	<b>-0.53*</b>	-1.56	-11.80	<b>-7.39**</b>	-0.43	-0.08	-0.33	-1.54	-2.71	-5.89	
	(0.3)	(2.49)	(11.3)	(3.18)	(4.6)	(0.18)	(0.97)	(7.77)	(8.08)	(7.41)	
3	<b>-0.46**</b>	-0.49	<b>14.70***</b>	-1.41	1.19	-0.21	-1.09	-8.27	-7.63	-4.97	
	(0.24)	(1.98)	(8.98)	(2.52)	(3.65)	(0.15)	(0.77)	(6.17)	(6.42)	(5.89)	
4	<b>-1.30***</b>	<b>-13.40***</b>	<b>-76.40***</b>	-4.66	-5.69	<b>-1.29***</b>	<b>-6.47***</b>	<b>-47.60***</b>	<b>-56.10***</b>	<b>-46.20***</b>	
	(0.33)	(2.82)	(12.8)	(3.59)	(5.21)	(0.21)	(1.09)	(8.8)	(9.15)	(8.4)	
5	-0.22	1.29	8.60	5.48	3.43	0.19	1.02	10.10	7.29	4.61	
	(0.56)	(4.72)	(21.4)	(6.02)	(8.71)	(0.35)	(1.83)	(14.7)	(15.3)	(14)	
6	-0.43	-0.93	-8.10	-6.69	-4.68	-0.10	-0.52	-0.60	-5.05	2.80	
	(1.07)	(8.97)	(40.7)	(11.4)	(16.5)	(0.67)	(3.48)	(28)	(29.1)	(26.7)	

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*Report of the Committee on Financial Sector Statistics, 2018*

Dependent Variables ->	(A) Liability Items				(B) Asset Items					
Independent Variables ↓	Deposits	Bonds & Debentures	Long Term Loans	Short Term Loans	Cash and Cash Equivalents	Investment in Govt/ Trust Securities	Investment in Bond/ Debenture	Investment in Equity Instrument / Shares	Investment in Mutual Funds	Loans & Advances
_Constant	-0.31	<b>-7.79**</b>	<b>-30.90***</b>	3.28	<b>-10.70*</b>	<b>-0.85***</b>	<b>-3.96***</b>	<b>-31.00***</b>	<b>-37.70***</b>	<b>-29.90***</b>
	(0.36)	(3.05)	(13.8)	(3.87)	(5.62)	(0.23)	(1.18)	(9.5)	(9.87)	(9.06)
R-square:	0.12	0.22	0.32	0.19	0.13	0.28	0.26	0.23	0.29	0.31

Note: Figures in first row are estimates of coefficients; and figures in parentheses in next row representing standard errors.  
 \*\*\* Significant at 1% level of significance;    \*\* Significant at 5% level of significance;    \* Significant at 10% level of significance.

**Annex 3.2 C: Regression Results for the Year 2015-16**

Dependent Variables ->	(A) Liability Items				(B) Asset Items					
Independent Variables ↓	Deposits	Bonds & Debentures	Long Term Loans	Short Term Loans	Cash and Cash Equivalents	Investment in Govt/ Trust Securities	Investment in Bond/ Debenture	Investment in Equity Instrument/ Shares	Investment in Mutual Funds	Loans & Advances
PUC	<b>0.37***</b>	<b>1.35***</b>	<b>5.27***</b>	<b>1.22***</b>	<b>1.06***</b>	<b>0.15***</b>	<b>0.38***</b>	<b>2.14***</b>	<b>2.81***</b>	<b>3.1***</b>
	(0)	(0.01)	(0.02)	(0)	(0.01)	(0)	(0)	(0.01)	(0.01)	(0.01)
<b>For independent variables "IIPGrowth" and "Age" - Coefficients and (Standard Errors) are in thousands of data unit.</b>										
IIPGrowth	2.38	26.46	343.57	<b>-374.39*</b>	<b>-646.24**</b>	0.38	12.71	222.84	214.33	-113.04
	(11.67)	(243.69)	(673.02)	(193.85)	(281.17)	(32.33)	(66.92)	(557.5)	(441.62)	(405.66)
Age	<b>28.46***</b>	<b>350.62***</b>	<b>1951.52***</b>	<b>507.21***</b>	<b>927.96***</b>	<b>51.55***</b>	<b>304.1***</b>	<b>2166.73***</b>	<b>1201.46***</b>	<b>1507.39***</b>
	(7.44)	(101.63)	(347.88)	(101.58)	(115.78)	(13.31)	(30.16)	(229.56)	(209.59)	(205.42)
<b>For independent variables "Indgroup", "List", "Type", Region and "Constant" - Coefficients and (Standard Errors) are in millions of data unit. Industry Groups</b>										
10	-0.78	-17.9	-73.5	-23.3	<b>147***</b>	-0.77	<b>30.4***</b>	62.8	51.1	10.3
	(1.47)	(19.8)	(68.1)	(19.9)	(22.5)	(2.59)	(5.88)	(44.6)	(40.9)	(40.2)
11	0.2	<b>14.7***</b>	<b>54.7***</b>	<b>10.1*</b>	4.31	<b>2.05***</b>	<b>3.71**</b>	17	<b>27**</b>	<b>26.9**</b>
	(0.41)	(5.58)	(19.1)	(5.58)	(6.35)	(0.73)	(1.65)	(12.6)	(11.5)	(11.3)
12	-0.05	5.43	18.9	1.97	7.03	0.57	1.47	9.44	9.25	14.1
	(0.51)	(6.95)	(23.8)	(6.94)	(7.93)	(0.91)	(2.06)	(15.7)	(14.3)	(14)
13	-0.17	2.2	-4.44	-4.25	2.58	0.21	0	5.13	0.67	1.59
	(0.88)	(12)	(40.9)	(12)	(13.6)	(1.57)	(3.55)	(27)	(24.7)	(24.2)
14	0.04	7.73	24.7	0.11	1.44	0.83	1.74	9.89	14.3	13
	(0.88)	(11.9)	(40.8)	(11.9)	(13.6)	(1.56)	(3.53)	(26.9)	(24.6)	(24.1)
15	-0.14	-0.18	-5.25	-9.45	-4.19	0.05	-0.98	-8.85	-2.7	-8.11
	(0.67)	(9.01)	(30.9)	(9.04)	(10.3)	(1.18)	(2.68)	(20.3)	(18.6)	(18.3)
16	-0.03	7.25	22.7	0.26	<b>31.1***</b>	0.72	2.11	17.9	15.1	<b>30.4*</b>
	(0.57)	(7.66)	(26.3)	(7.7)	(8.73)	(1)	(2.28)	(17.3)	(15.8)	(15.5)

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*Report of the Committee on Financial Sector Statistics, 2018*

Dependent Variables ->	(A) Liability Items				(B) Asset Items					
	Deposits	Bonds & Debentures	Long Term Loans	Short Term Loans	Cash and Cash Equivalents	Investment in Govt/Trust Securities	Investment in Bond/Debenture	Investment in Equity Instrument/Shares	Investment in Mutual Funds	Loans & Advances
Independent Variables ↓										
17	-0.4	-8.56	-40.1	8.26	10.2	-1.11	-3.74	-15.4	-24	-21.7
	(0.91)	(12.4)	(42.4)	(12.4)	(14.1)	(1.62)	(3.67)	(27.9)	(25.5)	(25)
18	0.09	-0.38	-5.08	1.93	4	0.01	-0.02	4.88	-1.55	4.51
	(0.39)	(5.25)	(18)	(5.25)	(5.99)	(0.69)	(1.56)	(11.9)	(10.8)	(10.6)
19	-0.03	3.44	8.39	-4.02	1.04	0.37	0.33	1.29	5.29	3.58
	(0.48)	(6.45)	(22.1)	(6.46)	(7.34)	(0.84)	(1.91)	(14.6)	(13.3)	(13.1)
20	-0.13	-0.14	-5.84	-4.19	-1.3	-0.32	-1.84	-8.38	-1.33	1.64
	(0.6)	(8.17)	(28.1)	(8.2)	(9.31)	(1.07)	(2.43)	(18.5)	(16.9)	(16.6)
21	0.04	6.38	14.9	6.61	-0.73	-0.43	-0.25	11.6	-3.17	6.19
	(0.42)	(5.77)	(19.7)	(5.74)	(6.57)	(0.76)	(1.71)	(13)	(11.9)	(11.6)
22	-0.11	-2.18	-8.83	-5.38	-5.71	-0.24	-1.02	-2.41	-7.98	-4.59
	(0.52)	(7.06)	(24.3)	(7.09)	(8.04)	(0.92)	(2.1)	(15.9)	(14.6)	(14.3)
23	-0.22	-0.35	-6.78	-6.65	2.19	0.04	-0.38	-0.63	0.84	-0.26
	(0.42)	(5.68)	(19.5)	(5.69)	(6.47)	(0.74)	(1.69)	(12.8)	(11.7)	(11.5)
24	-0.24	3.17	2.62	-7.26	13.4	0.51	0.76	3.3	12.4	14
	(0.9)	(12.2)	(41.9)	(12.2)	(13.9)	(1.6)	(3.63)	(27.7)	(25.2)	(24.7)
25	<b>1.01**</b>	-5.66	<b>-43.8*</b>	-7.94	-3.1	-1.34	<b>-3.78*</b>	-18.3	<b>-28.6**</b>	<b>-25.2*</b>
	(0.51)	(6.93)	(23.6)	(6.9)	(7.9)	(0.91)	(2.05)	(15.7)	(14.3)	(14)
26	-0.89	<b>-30.7***</b>	<b>-116***</b>	<b>-24.8**</b>	<b>27.6**</b>	<b>-3.24**</b>	<b>-8.05***</b>	<b>-37.6*</b>	<b>-46.3**</b>	-29.3
	(0.71)	(9.73)	(33.3)	(9.72)	(11.1)	(1.27)	(2.89)	(22)	(20.1)	(19.7)
27	-0.19	5.33	3.2	-5.69	6.77	0.53	0.85	5.19	7.39	7.58
	(0.79)	(10.7)	(36.7)	(10.7)	(12.2)	(1.4)	(3.18)	(24.2)	(22.1)	(21.6)
28	<b>-1.23*</b>	<b>-46.2***</b>	<b>-172***</b>	<b>-35.2***</b>	<b>-19.5*</b>	<b>-5.08***</b>	<b>-12.6***</b>	<b>-59.8***</b>	<b>-90.8***</b>	<b>-69.2***</b>
	(0.71)	(9.6)	(33)	(9.63)	(10.9)	(1.26)	(2.85)	(21.7)	(19.8)	(19.5)

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*Report of the Committee on Financial Sector Statistics, 2018*

Dependent Variables ->	(A) Liability Items				(B) Asset Items					
Independent Variables ↓	Deposits	Bonds & Debentures	Long Term Loans	Short Term Loans	Cash and Cash Equivalents	Investment in Govt/Trust Securities	Investment in Bond/Debenture	Investment in Equity Instrument/Shares	Investment in Mutual Funds	Loans & Advances
29	-0.87	-17.5	<b>-75.9*</b>	-17.5	-0.07	<b>-3.34**</b>	<b>-7.82**</b>	-39.7	-41.6	<b>-44.8*</b>
	(0.91)	(12.3)	(42.2)	(12.3)	(14)	(1.61)	(3.65)	(27.8)	(25.4)	(24.9)
30	0.38	4.52	8.42	<b>28.4***</b>	<b>29.8***</b>	0.51	1.22	6.72	5.03	14.8
	(0.57)	(7.97)	(26.8)	(7.81)	(9.1)	(1.05)	(2.35)	(18)	(16.2)	(15.8)
31	0.36	5.38	21.2	12.7	8.04	0.76	3.15	20.7	14	27.6
	(1.95)	(26.9)	(91.4)	(26.7)	(30.6)	(3.52)	(7.95)	(60.8)	(55.2)	(54)
Listing	<b>3.95***</b>	<b>94.5***</b>	<b>386***</b>	<b>201***</b>	<b>252***</b>	<b>6.28***</b>	<b>40.3***</b>	<b>342***</b>	<b>209***</b>	<b>358***</b>
	(0.76)	(11.5)	(37.2)	(10.8)	(13.2)	(1.51)	(3.34)	(26.1)	(22.9)	(22)
Type	-0.58	<b>-71.2***</b>	<b>-217***</b>	<b>-16.6**</b>	<b>-51.7***</b>	<b>-8.82***</b>	<b>-22.7***</b>	<b>-120***</b>	<b>-156***</b>	<b>-138***</b>
	(0.48)	(7.92)	(24.5)	(7.11)	(9.08)	(1.04)	(2.26)	(18)	(15.3)	(14.6)
Region										
2	-0.47	-1.39	-11.4	-5.68	-0.86	0.02	0.03	-4.31	1.07	-4.24
	(0.29)	(3.9)	(13.4)	(3.93)	(4.45)	(0.51)	(1.16)	(8.81)	(8.08)	(7.93)
3	-0.14	0.09	-5.65	0.59	-0.16	-0.03	-0.83	-2.06	-4.25	-0.4
	(0.23)	(3.11)	(10.7)	(3.12)	(3.54)	(0.41)	(0.92)	(7.02)	(6.42)	(6.3)
4	<b>-0.76**</b>	<b>-19.6***</b>	<b>-68.7***</b>	-5.72	-0.09	<b>-2.15***</b>	<b>-6.48***</b>	<b>-39***</b>	<b>-41.4***</b>	<b>-37.3***</b>
	(0.31)	(4.35)	(14.8)	(4.31)	(4.95)	(0.57)	(1.29)	(9.82)	(8.92)	(8.73)
5	-0.23	5.12	18.9	7.88	5.12	0.66	1.26	7	10.5	7.87
	(0.54)	(7.35)	(25.3)	(7.39)	(8.37)	(0.96)	(2.19)	(16.6)	(15.2)	(14.9)
6	-0.4	0.6	-1.56	-5.11	-5.93	0.18	-0.99	-2.74	-0.13	8.96
	(1.04)	(14)	(48.2)	(14.1)	(16)	(1.84)	(4.17)	(31.7)	(29)	(28.4)

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*Report of the Committee on Financial Sector Statistics, 2018*

Dependent Variables ->	(A) Liability Items				(B) Asset Items					
Independent Variables ↓	Deposits	Bonds & Debentures	Long Term Loans	Short Term Loans	Cash and Cash Equivalents	Investment in Govt/ Trust Securities	Investment in Bond/ Debenture	Investment in Equity Instrument/ Shares	Investment in Mutual Funds	Loans & Advances
Constant	-0.26	<b>-15.6***</b>	<b>-59.2***</b>	-4.11	<b>-19.5***</b>	<b>-1.89***</b>	<b>-7.03***</b>	<b>-46.5***</b>	<b>-38.6***</b>	<b>-40.4***</b>
	(0.34)	(4.67)	(16)	(4.68)	(5.32)	(0.61)	(1.39)	(10.6)	(9.64)	(9.46)
R-square:	0.0694	0.2242	0.311	0.2313	0.1227	0.1718	0.2228	0.1242	0.2484	0.3092

Note: Figures in first row are estimates of coefficients with figures in parentheses in next row representing standard errors.

\*\*\* Significant at 1% level of significance; \*\* Significant at 5% level of significance; \* Significant at 10% level of significance.

## **Chapter 4**

### **Flow of Funds Compilation for Local Governments**

#### **Section I: Introduction**

##### **I.1 SNA 2008 on Local Government**

4.1. SNA 2008 recognises the local Government<sup>15</sup> as a separate sub-sector of the GG sector along with the Central and the State Governments. Under SNA 2008, the local Government sub-sector consists of local Governments *plus* those non-market Non-Profit Institutions (NPI) controlled by the local Governments. In principle, fiscal, legislative and executive authority of the local Government extends over the smallest geographical areas distinguished for administrative and political purposes. The scope of their authority is generally much less than that of Central or State (regional) governments, and they may, or may not, be entitled to levy taxes on institutional units and/ or resident in their areas. They are often heavily dependent on grants or transfers from higher levels of Government, and they may act as agents of Central or regional governments to some extent.

##### **I.2 Efforts of the RBI in Compiling Local Bodies Data**

4.2. The RBI used to compile data on LBs through the “Survey on Borrowings and Investments of Local Authorities” (subsequently renamed as the “Finances of Local Authorities”). First such survey was undertaken in 1957<sup>16</sup> with a view to gather detailed information from select Local Authorities (LAs) on their borrowings and investments as on reference date. However, it also covered revenue/ capital receipts and disbursements during the reference year. Data collected through this survey were used for FoF compilation. The survey covered the Port trusts, city corporations and municipalities in towns with a population of 1 lakh and more as per the latest available census data. A

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<sup>15</sup>The terminology local Government/ local bodies/ local authorities refers to the same institution. However, the term used in respective literature has been retained.

<sup>16</sup>Covering data for the period from 1951-52 to 1956-57 and results were published in April 1958 issue of the RBI Bulletin.

detailed list of variables compiled under the said survey is given in Annex 4.1. Subsequently, on account of poor response, the survey was discontinued. At present, following SNA 2008, port trusts are classified under non-financial sector. In the absence of any reliable data on other LBs, separate classification is not made<sup>17</sup>.

### **I.3 Structure and Accounting System of Local Bodies in India**

4.3. In India, jurisdiction of the LBs extends over villages, towns or cities. The LBs constituted for rural areas – RLBs, popularly known as the Panchayati Raj Institutions (PRIs) – consists of three layers, namely, Gram Panchayats (GP), Panchayat Samiti (PS) and Zilla Parishad (ZP); and those constituted for urban areas – ULBs - are known by names such as Nagar Parishad, Nagar Palika, Municipality, Municipal Corporation etc.

#### **I.3.1 Rural Local Bodies**

4.4. The 73<sup>rd</sup> Constitutional Amendment Act of 1992 contains provisions for devolution of powers and responsibilities to the panchayats both for (a) preparation of plans for economic development and social justice and (b) implementation in relation to twenty-nine subjects listed in the eleventh schedule of the constitution. The Ministry of Panchayati Raj (MoPR) was set up to institutionalise the PRIs at village, Taluka, and district levels, as the third tier of the Government. These panchayats receive funds from three main sources, namely, local body grants as recommended by the Central Finance Commission (CFC), funds for implementation of Central Government sponsored schemes, and funds released by the State governments on the recommendations of the SFC. They may also raise own resources through local taxes and service charges.

##### ***I.3.1.1 Maintenance of Panchayats' Accounts***

4.5. Article 243J of the Constitution states that the legislature of a State may, by law, make provisions with respect to the maintenance of accounts by the Panchayats and auditing of such accounts. To keep an account of income and expenditure of PRIs, at the

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<sup>17</sup> However, based on data from the counterparties, financing of the local bodies may be included in GG or 'other' (unclassified) sector.

district and State levels, formats suggested by the CAG were accepted by the MoPR and National Informatics Centre was entrusted to develop input screens on the Ministry's portal and link this to all States for uploading of State-wise data.

### **I.3.2 Urban Local Bodies**

4.6. Similarly, the mandate of the ULBs is to undertake planning for 'economic development and social justice' and implement city/town development plans. The major sources of revenue for ULBs are local taxes (property tax, municipal tax, water charges, etc.) and grants from Central/ State Governments. For some large ULBs, development charges levied on real estate is also one of the major non-tax revenues. Big municipal corporations may also raise funds by issuing bonds in financial markets or by raising loans from international agencies. There may be cases, though rare, where LBs may finance the projects of Central/ State Government or international agencies.

#### **I.3.2.1 Accounting System of ULBs in India**

4.7. Most ULBs in India follow a cash based instead of accrual based accounting system and no distinction is made between revenue and capital items. While cash based accounts serve the purpose of legislative control over public finances, it provides room for fiscal opportunism. As such, financial statements of ULBs following cash based accounting do not reflect their complete and comprehensive financial position with relation to fixed assets/ depreciation, capital work-in-progress, current/ contingent assets/ liabilities, etc.

4.8. Therefore, there is a strong need to move towards a double entry accrual-based system, wherein transactions reflect in the books of accounts of the period in which they accrue and arise, irrespective of actual receipt or payment taking place during the period. Accrual based accounting makes a distinction between capital and revenue items and present the financial status of the ULBs in more comprehensive and consolidated manner. As such, an accrual system is helpful in expanding the efficacy of fiscal management.

#### **I.4 Approach of the Committee on Capturing Local bodies Data**

4.9. Following the recommendations of the SNA 2008, the CSO attempted to cover the local Government sub-sector in the revised system of National Accounts since 2011-12. However, the RBI has not so far included this sub-sector in the FoF accounts. Recognising the fact that collection of statistics from the LBs may be a challenge, the Committee formed a sub-group to specifically look into the issues. The sub-group studied availability of data in respect of LBs with special focus on rural bodies, which is described in Section II. Considering the difficulties in collecting data from large number of rural bodies with disparate systems, the Committee decided to prioritise collection of data from the ULBs, in particular, the big municipal corporations. Also, the CSO prepared a note on present status of collection of data on LBs for national accounts purpose, which is presented in Section III. RBI (DEPR) in consultation with the CSO finalised a format for capturing the data on LBs as required for FoF (Section IV). Further, consultations with representatives from the AIILSG, involved in research and training of staff in municipal administration and officials of the Directorate of Municipal Administration (DMA) were held to check the feasibility of collecting data as per the devised format (Section V). The last section discusses the Way Ahead.

### **Section II: Issues in Data Collection from Local Bodies in India**

#### **II.1 Availability of Rural Local Bodies' Data**

4.10. Eleventh FC addressed the issue of non-availability of LBs accounts for the first time, especially for devolution. To bring uniformity in data compilation, CAG prepared eight different forms in 2002. However, their adoption by PRIs was very poor. Subsequently, the Technical Committee on Budget and Accounting Standards for PRIs (2008) designed and developed a simple and robust accounting system with the help of the National Informatics Centre, namely, Panchayati Raj Institutions Accounting Software (PRIASoft). This web-enabled software having role based authentication included a centralised database for all the inflows (receipts) and outflows (expenditures) of the PRIs' accounts. This software was intended to be of use to all the stakeholders, namely, three

levels of Panchayati Raj (District Panchayat, Panchayat Union and Village Panchayat), the CAG, State Accountant Generals (AGs) and the citizens. The software facilitated proactive disclosure of accounts of the Panchayats, up to voucher level in public domain for viewing by all stakeholders including citizens. The software followed cash based double-entry system of book-keeping done in an intuitive and user-friendly manner without unduly burdening the end-user with the knowledge of accounting. The software also facilitated adopting of eight accounting formats prescribed by the CAG. Despite being simple and providing on-site support, implementation of the software remained only partial. Also, some of the states have developed their own software (AP/ Kerala - Saankhya, Karnataka - Panchamitra, MP – Panchayat Darpan, and WB - Gram Panchayat Management System (GPMS)).

4.11. Subsequent FCs continued to focus on improving the PRI accounts. In this regard, the Thirteenth FC conditioned adoption of the CAG format by the LBs and placing their audit report in the legislative assembly for release of performance grants. At present, 13 states are placing audited reports of their LBs in legislative assembly. Fourteenth FC suggested 10 per cent performance grants for LBs on producing last three years of audited statements. However, the information flow, even for deciding on devolution, is still scanty. Fourteenth FC had undertaken a large survey of LBs with regard to their core functions and finances. Responses revealed that only nine states claimed full implementation of adoption of CAG formats, 10 states claimed partial implementation, and six states reported either implementation at an early stage or no implementation (Table 1). Three states did not respond to the survey. However, as per CAG reports, only four states have fully implemented adoption of their formats. This is despite National Informatics Centre deploying three staff in each state for technical support on the software developed by them.

**Table 1: Implementation Status of Software for Adoption of CAG Formats Based on the Survey Conducted by the 14th Finance Commission**

Fully implemented	Partially implemented	Not implemented or implementation at early stage	No response
Maharashtra, Himachal Pradesh, Tripura, Karnataka, Kerala, Madhya Pradesh, Punjab, Uttar Pradesh, West Bengal	Andhra Pradesh, Assam, Bihar, Haryana, Gujarat, Rajasthan, Sikkim, Chhattisgarh, Manipur, Tamil Nadu	Arunachal Pradesh, Mizoram, Goa, Jammu & Kashmir, Meghalaya, Uttarakhand	Jharkhand, Nagaland, Odisha

Source: Report No. 38, Centre for Policy Research.

4.12. The sub-group on LBs' data tried to find out the status of online availability of LBs' accounts for the states of Andhra Pradesh, Karnataka and Rajasthan, and also had discussions with some of the officials. LBs in these three states are using different software. Findings of the sub-group are delineated below:

- In Rajasthan, PRIAsoft (managed by the National Informatics Centre) is used only for updating receipts from the CFC and the SFC as well as expenditures. The software provides only the cashbook (monthly as well as annual). Recently, Rajasthan has started using integrated e-Panchayat Raj software. One needs to see how this initiative would help in generating online data.
- Karnataka uses Panchamitra software, which is managed by the National Informatics Centre and provides micro level data on household especially for own tax revenues.
- Andhra Pradesh (AP) has a software managed by the Centre for Good Governance (CGD) and the DES. AP software provides an integrated and macro level statistics. The consolidated data for GPs, Mandal Parishads (MPs), ZPs, Municipal Bodies as well as municipal corporations are available for AP.
- The pace of reporting data through the adopted accounting software varied in these states. Data updating process was the fastest in Karnataka where data for 2016-17 are available for most of the GPs. For Andhra Pradesh, data for 2015-16

were available for almost all the LBs and data entry for 2016-17 was in progress. In Rajasthan, only 80% of GPs updated their data in PRIASoft for 2015-16, consisting of CFC and SFC funds only. The updating for 2016-17 was yet to start (until mid-2017). Balance sheets data were not uploaded in the PRIASoft.

- On the other hand, all the States had completed compilation of the accounts for Mahatma Gandhi National Rural Employment Guarantee Scheme (MGNREGS) for 2016-17 by the end of April 2017 but none of the above accounting software captures the MGNREGS funds, as the same is done outside the treasury system. (Under MGNREGS, the money is transferred to the beneficiary directly and does not enter the LBs' books.)

## **II.2 Discussions with Government Officials**

4.13. The sub-group visited Umrena Block Panchayat in Alwar district of Rajasthan, which was identified for implementation of Integrated Raj e-Panchayat software. The sub-group also had discussions with Sangam Mandal Praja Parishad (SMPP) of Nellore district in Andhra Pradesh and the officials who are handling *Panchamitra* in Karnataka. The issues highlighted during discussions are broadly categorised in three sub-sections as below:-

### **II.2.1 *Issues in Fund Flow Mechanism***

4.14. In many cases, funds are received from Central/ State Governments and other LBs directly. In direct benefit transfer and MGNREGS schemes, the money is transferred directly to the beneficiary and does not enter the LBs books. Funds relating to Swatch Bharat Mission, Prime Minister Awas Yojana (PMAY), etc. are getting transferred from Blocks directly to GPs. Service provisions through parastatals (both in rural and urban LBs) also takes place outside the government system.

### **II.2.2 *Issues Relating to Technical Support and Multiple Software***

4.15. In some of the States, technical support is available at the Block level, while in other States the support is available only at district level. Further, training and technical

skills appear to be the major issue at GP level. GP officials also complain about electricity, IT, as well as internet facilities at the GP level. In some cases, software do not capture Own Revenues. Integration of data captured through multiple software, such as, NREGAsoft, PRIAsoft, AWASsoft, Planplus, etc.; remains a challenge in bringing such data to a uniform platform.

### **II.2.3 Other Issues**

4.16. Weak co-ordination among PRIs, Finance (Local Fund Organisations) and Planning/ Statistics Departments; weak co-ordination among the LB officials itself; and delay in auditing as well as submitting the same to the State legislature are some other issues in compilation and timely availability of LBs' data. Very few States are having granular level information of the finances at GP level.

4.17. Further, the absence of robust systems and staff constraints among others make it very difficult to obtain such information from LBs. Hindrances, like non-maintenance of proper accounts at local body level, lack of monetary resources and skilled manpower to collect & consolidate the huge database from large number of GPs, etc.; pose problems in data compilation for LBs.

## **Section III: Status of Data Collection by the CSO**

4.18. CSO has been collecting LBs' data and after projections/ estimations, using it to compile the GG figures in the National Accounts Statistics. With an objective to derive district level GDP figures, 13th FC recommended to collate receipts and payments data for LBs. The CSO devised a simple schedule (Part I of Annex 4.2) consisting of sections regarding the current and capital receipts as well as current and capital expenditure at aggregate level for each LB and a separate section to enter the information of funds available with the LB. The schedule was designed keeping in view the activities of LBs as listed in the Article 243G and 243W of the Constitution. Responsibility of collecting such data was entrusted to the DES of respective states. The CSO scheme to be followed by all the States for capturing LBs' data was as follows:

- i) All the States had to prepare a list of LBs up to 'GP' level. The list included the information on population, total annual receipts and expenditure of local body. The

information on total annual receipts and expenditure was to validate the collected data.

- ii) All RLBs in each taluk/ block/ mandal had to be covered in three phases: 30% in phase-I, 30% in phase-II and the remaining in the third phase while the ULBs were to be covered on census basis each year. Phasing was proposed due to the difficulties faced by the DES in mobilizing the resources in a short span of time.
- iii) Panchayats selected in each phase were to be divided into two groups to have a check on non-sampling errors. Information was to be collected by separate investigators for these two groups of Panchayats.
- iv) Information in respect of LBs was to be collected for at least three years in each phase. If the collection year is t, information is required to be collected for year t-3, t-2 and t-1. In this manner, it was ensured that data for base year 2011-12 was available on census basis.
- v) These data were converted into the main accounts as per the national accounts methodology.
- vi) Block level estimates were arrived at by compiling all the Panchayat level estimates available for that at block and using an appropriate multiplier. The block level estimates were summed up further to have aggregation at district, State or country.

4.19. Following the above scheme, the coverage of LBs' data has increased considerably and the revised 2011-12 series of national accounts now covers LBs' data in respect of 21 States/UTs. The Committee suggests that CSO may rigorously follow-up with the non-responding States to further improve the coverage.

### **III.1 Scope for Improvement:**

4.20. There is a scope for improvement in the data received from the States. The main focus of the States has been to prepare the net value added (NVA) and capital formation estimates. Data on purpose accounts, income outlay accounts and borrowing accounts are not being compiled by all the States. Further, complete information regarding the types of taxes levied, loans, transfers etc. are also not being provided by all the States.

Hence, approximations are being done while compiling the saving estimates at all-India level and in segregation of taxes into product and production taxes.

#### **Section IV: Format for Capturing Local Bodies' Data for FoF**

4.21. To compile the FoF data pertaining to LBs, a simple data template was devised by the Sub-group (Part II of Annex 4.2) on balance sheets items. The template covers loans and borrowings with sectoral breakup; other accounts receivables/ payables and other liabilities (including unused grants) on the liabilities side and currency (cash in hand); deposits with the sectoral breakup under short and long term deposits; other accounts receivables/ payables and other assets on the assets side. This format was provided to DES of various states to explore the possibility of submitting this data on a regular basis. So far, response is received only from one state (Himachal Pradesh) (Data given in Annex 4.3).

#### **Section V: Discussions with the Representatives of AIILSG and DMA Maharashtra**

4.22. Discussions with the representatives from AIILSG revealed that most of the ULBs prepare their balance sheets but with a substantial time lag and a few large ULBs (mainly municipal corporations) post annual accounts on their own websites. However, all the municipalities/ nagar panchayats report select key accounting data to the respective central authority in the State, namely, DMA or Commissioner and Director of Municipal Administration (CDMA). This reporting is required for getting Central/ State Governments' finances. However, such data are not always placed in public domain. Further, there is no systematic way/ common format to report these data to DMAs/ CDMA. A number of LBs in various States are using PRIAsoft for preparing their balance sheets. However, some of the LBs are still preparing their accounts based on single entry accounting systems. AIILSG is, however, providing consultancy services to these ULBs to prepare their accounts based on double entry accounting system. The format of balance sheets of LBs also varies from State to State.

4.23. As suggested by the representatives of the AIILSG, a meeting was held with Shri. Virendra Singh, IAS, Commissioner and Director, DMA, Maharashtra. From the

discussions with the DMA, it is understood that at present there are 27 Municipal Corporations, 237 Municipal Councils and 127 Nagar Panchayats in Maharashtra. Municipal Corporations prepare their annual accounts and report the same to the Principal Secretary, Urban Development Department of the Maharashtra Government. Most of them also publish the same on their respective websites. Further, Municipal Councils and Nagar Panchayats in Maharashtra prepare their accounts and submit the same to DMA. RLBs come under the purview of Rural Development Department of Maharashtra Government.

4.24. ULBs in Maharashtra prepare their accounts on accrual basis and required to get the same audited internally by June 30<sup>th</sup> to report the same to the DMA. DMA publishes local body-wise data on their website [www.mahaulb.maharashtra.gov.in](http://www.mahaulb.maharashtra.gov.in). However, the data compiled presently on LBs mainly cover major heads of receipts and expenditure.

4.25. The data desired in the templates for compilation of FoF are assets and liabilities data, which are not being reported by LBs to the DMA. Further, the receipt and expenditure data as per CSO format required for compilation of National Accounts are also not presently available with such granularity with the DMA. However, the DMA may help in collecting such data in required formats (CSO as well as the RBI) from the LBs under its purview, after receiving an official request from the competent authority along with the required software for capturing such data.

4.26. DMA also indicated that similar administrative setup might be followed in all the States in respect of LBs. Financial data on LBs at the national level is not available at a single place. Therefore, to have a holistic picture of the LBs' accounts in India, the said three departments in each state are to be contacted to explore the data availability.

## **Section VI: Way Ahead**

4.27. The availability of required data on LBs in an uniform computer extractable format in timely manner, which is crucial for its use in preparation of National Accounts and FoF accounts, has remained a challenge over the period due to various reasons. Even the CSO, with the help of the DES in the States, is not able to capture data from all the States

and UTs on a regular basis. Some of the reasons are hand written accounts, inaccessibility/non-maintenance of proper accounts at local body level, lack of IT skilled manpower/infrastructure, large number of LBs, and insufficient monetary resources. While the system of data compilation of LBs' accounts across the country has improved to some extent, due to the steps taken by the Government from time to time, there is still a large scope for further improvement. Still the accounting practices, followed by the various LBs across the country, vary significantly. Some of the LBs in India are quite big in terms of their budget and in some cases, they financed the central/ state government projects. Therefore, such an important segment of the economy cannot be left out while compiling the National Accounts and the FoF. Based on the observations made by the sub-group, the Committee recommends the following -

- i) CSO/ MoSPI may collect data on LBs as per the proforma devised by the Committee from the DES in each state and share the same with the RBI. They should rigorously follow-up with the DES in case of non-response.
- ii) The Government may form a High Level Committee (comprising members from Urban Development Department, Ministry of Panchayati Raj, Ministry of Statistics and Programme Implementation, RBI, and representatives from select states' Directorate of Economic and Statistics, DMAs, representatives from select large municipal corporations) to fine tune the format, if required for meeting the data requirements of all stakeholders.
- iii) All the States may use a uniform software for capturing data of RLBs/ ULBs. In case of any issue, they may take up the matter with the CAG or the National Informatics Centre. It will enable easy compilation of national level aggregates. Necessary software may also be developed for capturing this data from LBs and it may be made mandatory to all LBs (rural as well as urban) to report the data in the prescribed format. Necessary administrative/ financial support may be provided to the LBs for this purpose. Once, the system is developed, the responsibility of continuous monitoring of data may be assigned to the respective DES. CSO and RBI may access the system to get desired data as required for National Accounts and FoF Accounts.

- iv) Looking to the large number of RLBs, there is a need to have National e-Panchayat system that will link/integrate the information pertaining to RLBs available in all the states (including Autonomous District Council (ADC) states). National Informatics Centre may undertake this job in coordination with the Ministry of Panchayti Raj (MoPR).
- v) For better accessibility and uniformity, MoPR may provide such data on their website.
- vi) While National Informatics Centre is providing technical support at the district level for updating the accounts, as in the MGNREGS, some provision for 'Administrative Cost' may be made either in the CFC or the SFC or in both to help the GPs to maintain their financial accounts as per the prescribed system.
- vii) Necessary trainings may be arranged at periodic intervals for manpower responsible for creating, reporting data and maintaining data at LBs as well as those involved in operating the software.
- viii) The Committee learnt that with the Fifteenth Finance Commission may be undertaking a survey with regard to RLB's capacity in generating own revenues. The Commission may be approached to involve CSO/RBI in structuring the survey so that the results of the survey may be used at a later stage in compilation of national accounts and FoF.

**Annex 4.1: Major Items Covered under the RBI Survey on “Finances of Local Authorities”**

**1. Revenue and Capital Receipts of Local Authorities**

**1.1 Revenue Receipts**

**1.1.1 Rates and Taxes**

**1.1.1.1 Rates**

**1.1.1.2 Taxes**

**1.1.1.2.1 Of which, Property Tax**

A. on Residential Property

B. on Non-Residential Property

**1.1.2 Non Tax Revenues**

**1.1.2.1 Receipts from Remunerative Enterprises**

**1.1.2.2 Gross Receipts from property**

**1.1.2.3 Fees, Fines, etc.**

**1.1.2.4 Grants**

**1.1.2.4.1 Of which, Grants from Governments**

**1.1.3 Other Revenue receipts**

**1.2 Capital Receipts**

**1.2.1**

**Loans**

**1.2.1.1 From Market**

**A. Amount Received**

i. Below 5 Years

ii. 5 yrs. And above but less than 10 yrs.

iii. 10 yrs. And above but below 15 yrs.

iv. 15 yrs. And above

**B. Amount Repaid**

**C. Net Amount**

i. Amount Received

ii. Amount Repaid

iii. Net Borrowings

**B. State Government**

i. Amount Received

ii. Amount Repaid

iii. Net Borrowings

**A. Of which, From Banks**

i. Amount Received

*Continued ...*

- ii. Amount Repaid
  - iii. Net Loans
- 1.2.2 Other Capital Receipts
- 1.2.2.1 Withdrawal from Deposits
  - 1.2.2.2 Appropriation from reserve funds
  - 1.2.2.3 Sale proceeds of Securities
  - 1.2.2.4 Others

## **2 Disbursements by Local Authorities**

- 2.1 For General Administration
  - 2.1.1 *Of Which*, Wage and Salaries
- 2.2 To Remunerative Enterprise
  - 2.2.1 *Of Which*, Wage and Salaries
- 2.3 For public services
  - 2.3.1 Public Safety
  - 2.3.2 Public Health and Governance
  - 2.3.3 Public Works
  - 2.3.4 Public Instructions
- 2.4 Plant and Machinery
- 2.5 Depreciation
- 2.6 Maintenance and Repairs
- 2.7 Amortization Payments
- 2.8 Interest Payment
- 2.9 Provision for Sinking Funds
- 2.10 Transfers to Reserve Funds
- 2.11 Other Disbursements
- 2.12 Revenue Account
- 2.13 Capital Account
  - 2.13.1 Repayment of Loans and Advances
  - 2.13.2 Deposits with Banks and Others
  - 2.13.3 Others

## **3. Outstanding Debt/ Borrowings of Local Authorities**

- 3.1 From market
  - 3.1.1 Loans Floated
  - 3.1.2 Issued Amount
  - 3.1.3 Amount subscribed

*Continued ...*

- 3.2 From Government
  - 3.2.1 Central Government
  - 3.2.2 State Government
  - 3.2.3 Other Local Bodies
- 3.3 From Others
  - 3.3.1 *Of which*, from banks

#### **4. Investments of Local Authorities – Own Accounts**

- 4.1 Central Government securities
  - 4.1.1 Treasury Bills
  - 4.1.2 Other Securities
- 4.2 State Government securities
- 4.3 Local Authorities securities
- 4.4 Small Savings Schemes
- 4.5 Cash on Hand
- 4.6 Demand Deposits with Banks
- 4.7 Time Deposits with Banks
- 4.8 Shares and Debentures of
  - 4.8.1 Joint Stock Companies
  - 4.8.2 Cooperative Institutions
  - 4.8.3 Other Investments

#### **5. Investments of Local Authorities – Other Accounts**

- 5.1 Central Government securities
  - 5.1.1 Treasury Bills
  - 5.1.2 Other Securities
- 5.2 State Government securities
- 5.3 Local Authorities securities
- 5.4 Small Savings Schemes
- 5.5 Cash on Hand
- 5.6 Demand Deposits with Banks
- 5.7 Time Deposits with Banks
- 5.8 Shares and Debentures of
  - 5.8.1 Joint Stock Companies
  - 5.8.2 Cooperative Institutions
  - 5.8.3 Other Investments

*Continued ...*

**6. Investment of Provident Funds Collected (Local Authorities)**

6.1 Central Government

    6.1.1 Treasury Bills

    6.1.2 Other Securities

6.2 State Government

6.3 Local Authorities

6.4 Small Savings

6.5 Others

**7. Investment of Amount Deposited by Contractors to Local Authorities**

**8. Information on Gross Fixed Capital Formation**

8.1 Gross Value of Buildings

8.2 Gross Value of Plant and Machinery

8.3 Gross Value of Vehicles

8.4 Gross Value of Other Fixed Assets

8.5 Accumulated Depreciation on Buildings

8.6 Accumulated Depreciation on Plant and Machinery

8.7 Accumulated Depreciation on Vehicles

8.8 Accumulated Depreciation on Other Fixed Assets

**Annex 4.2: Common Template for Combined Requirement of Compilation of National Accounts (Sequence of Accounts) and FoF from Local Bodies**

**PART-I**

**Schedule for Local Bodies to Collect Receipt and Payment Data**

**Government of India**

**Central Statistics Office**

**Schedule for Preparation of Local Bodies Accounts**

Rural		*	Phase-I		*	Group-I		*
Urban			Phase-II			Group-II		
			Phase-III					

\* Please tick() the relevant entry

<b>Block 0: Identification Particulars</b>	
1. Name of State/UT	
2. Name of District	
3. Name of Tehsil/Taluk/Block	
<b>4. Type/Level of Local Body</b>	
4.1 In case of Rural (Please tick the relevant entry)	Zila Parishad/ Panchayat Samiti/ Gram Panchayat
4.2 In case of Urban (Please tick the relevant entry)	Municipal Corporation/ Municipality / Nagar Panchayat
5. Name of Local Body	
6. Code of Local body (code/SI. no maintained by State, if any)	
7. Number of villages/wards in Local Body	
8. (In case of rural)Name(s) of villages covered under the Local Body	
9. Total Population covered under the local body (In 2011 census)	
10. Area covered under Local Bodies (In Square km.)	
11. Whether Panchayat is maintaining proper Accounts (Yes or No )	
12. Accounting Year	
13. Name and Designation of Informant	
14. Name of Investigator	
15. Date of Collection of Data	

*Report of the Committee on Financial Sector Statistics, 2018*

<b>Block 1: Receipts</b>		
<b>I. Current Receipts</b>		
<b>S. No</b>	<b>Description of Item</b>	<b>Estimate</b>
		<b>(In Rs. Thousands)</b>
1	2	3
<b>1</b>	<b>Direct Taxes</b>	
	1.1 Land revenue	
	1.2 Property tax	
	1.3 Other direct taxes	
<b>2</b>	<b>Indirect Taxes</b>	
	2.1 Tax on vehicles	
	2.2 Entertainment tax	
	2.3 Stamp duty	
	2.4 Other indirect taxes	
<b>3</b>	<b>Commercial Receipts</b>	
<b>4</b>	<b>Sale of goods &amp; services</b>	
	<b>4.0 TOTAL</b>	
	4.1 General Public Services	
	4.2 Education Services	
	4.3 Health Services	
	4.4 Social Security and Welfare Services	
	4.5 Housing and Community Amenity Services	
	4.6 Cultural Recreational and Religious Services	
	4.7 Agriculture, Forestry, Fishing and Hunting	
	4.8 Manufacturing	
	4.9 Electricity & Gas	
	4.10 Water Supply	
	4.11 Transport	
	4.12 Construction	
	4.13 Environment Protection	
	4.14 Relief on calamities	
	4.15 Sanitation	
	4.16 Others	
<b>5</b>	<b>Fees, fines &amp; misc. services</b>	
<b>6</b>	<b>Property Income</b>	
	6.1 Interest receipts	
	6.2 Rent and Royalty	
<b>7</b>	<b>Current Grants From</b>	
	7.1 Centre	
	7.2 State	

*Annex 4.2 Continued*

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<b>Block 1: Receipts</b>		
<b>I. Current Receipts</b>		
<b>S. No</b>	<b>Description of Item</b>	<b>Estimate (In Rs. Thousands)</b>
1	2	3
	7.3 Other local bodies	
	7.4 Others	
<b>8</b>	<b>Withdrawal from Deposit funds</b>	

<b>II. Capital Receipts</b>		
<b>S. No</b>	<b>Description of Item</b>	<b>Estimate</b>
		<b>(In Rs. Thousands)</b>
<b>1</b>	<b>2</b>	<b>3</b>
<b>1</b>	<b>Grants</b>	
	1.1 <b>From centre</b>	
	1.1.1 MGNREGS	
	1.1.2 Sarva Shiksha Abhiyan	
	1.1.3 Indira Awas Yojna	
	1.1.4 National Rural Health Mission	
	1.1.5 PM Gram Sadak Yojna	
	1.1.6 Other Central Grant	
	1.2 <b>From state</b>	
	1.2.1 MGNREGS	
	1.1.2 Sarva Shiksha Abhiyan	
	1.2.3 Indira Awas Yojna	
	1.2.4 National Rural Health Mission	
	1.2.5 PM Gram Sadak Yojna	
	1.2.6 Other State Grant	
	1.3 <b>Grants from other local bodies</b>	
	1.4 <b>Grants from others</b>	
<b>2</b>	<b>Sale of Financial Assets</b>	
<b>3</b>	<b>Sale of Land</b>	
	3.1 Administration	
	3.2 DCU	
<b>4</b>	<b>Sale of Second hand Assets</b>	
	4.1 <b>Sale of Building</b>	
	4.1.1 Administration	
	4.1.2 DCU	
	4.2 <b>Sale of Other Assets</b>	
	4.2.1 Administration	
	4.2.2 DCU	

*Continued ...*

*Report of the Committee on Financial Sector Statistics, 2018*

Block 2: Expenditures															
I. CURRENT EXPENDITURE (In Rs. Thousands)															
S. No.	Items →	Salary	Wages	Benefits	Pension	Purchased Goods and Services	Maintenance			Current Transfers		Subsidies	Interest Payments		
	Purpose	1	2	3	4	5	6.1	6.2	6.3	7.1	7.2	8	9.1	9.2	9.3
1	General Public Services														
2	Education Services														
3	Health Services														
4	Social Security and Welfare Services														
5	Housing and Community Amenity Services														
6	Cultural Recreational and Religious Services														
7	Agriculture, Forestry, Fishing and Hunting														
8	Manufacturing														
9	Electricity & Gas														
10	Water Supply														
11	Transport														

*Report of the Committee on Financial Sector Statistics, 2018*

<b>Block 2: Expenditures</b>															
<b>I. CURRENT EXPENDITURE (In Rs. Thousands)</b>															
S. No.	Items →	Salary	Wages	Benefits	Pension	Purchased Goods and Services	Maintenance			Current Transfers		Subsidies	Interest Payments		
	Purpose	1	2	3	4	5	6.1	6.2	6.3	7.1	7.2	8	9.1	9.2	9.3
12	Construction														
13	Environment Protection														
14	Relief on calamities														
15	Sanitation														
16	Others														
17	Total														

*Continued ...*

*Report of the Committee on Financial Sector Statistics, 2018*

II. CAPITAL EXPENDITURE (In Rs. Thousands )																
S. No.	Items →				Purcha se of hand assets											
	<b>Purpose</b>	1	2	3.1	3.2	4.1	4.2	4.3	4.4	4.5	4.6	4.7	4.8	4.9	5	6
1	<b>General Public Services</b>	1														
2	<b>Education Services</b>	3														
3	<b>Health Services</b>	4														
4	<b>Social Security and Welfare Services</b>	5														
5	<b>Housing and Community</b>	6														

*Continued ...*

*Report of the Committee on Financial Sector Statistics, 2018*

II. CAPITAL EXPENDITURE (In Rs. Thousands )																
S. No.	Items →				Purcha se of hand assets											
	<b>Purpose</b>	1	2	3.1	3.2	4.1	4.2	4.3	4.4	4.5	4.6	4.7	4.8	4.9	5	6
	<b>Amenity Services</b>															
6	<b>Cultural Recreational and Religious Services</b>	7														
7	<b>Agri-culture, Forestry, Fishing and Hunting</b>	8.2														
8	<b>Manufacturing</b>	8.3														
9	<b>Electricity &amp; Gas</b>	8.4														

*Continued ...*

*Report of the Committee on Financial Sector Statistics, 2018*

S. No.	Items →	II. CAPITAL EXPENDITURE (In Rs. Thousands )														
		Purchased in Se co nd hand assets	Purchase of fixed assets	Road	Building	Transport	Capital stock less depreciation	Machinery	Software	Animals Stock	Cultivated lands	Capital transfers	Change in stock			
		1	2	3.1	3.2	4.1	4.2	4.3	4.4	4.5	4.6	4.7	4.8	4.9	5	6
	<b>Purpose</b>															
10	<b>Water Supply</b>	8.5														
11	<b>Transport</b>	8.6														
12	<b>Construction</b>	8.3														
13	<b>Environment Protection</b>	9														
14	<b>Relief on calamities</b>	10.1														
15	<b>Sanitation</b>	6.2														
16	<b>Others</b>	10.2														
17	<b>Total</b>															

*Continued ...*

<b>BLOCK-3: Items of Expenditure of Departmental Commercial Undertakings (If any) in the Local Body</b>														
<b>I. Current Expenditure (In Rs. Thousands)</b>														
Sales No.	(in ' ) Receipts Current	Items	Salary	Wages	Benefits	Pension	PurchaseofGoodsand Services	Maintenanc e	Building	Road	Other Construction	InterestPayments	Rent	Depreciatio n
1	Industry	1	2	3	4	5	6.1	6.2	6.3	7	8	9		
1	Agriculture (Irrigation)													
2	Transport													
3	Electricity													
4	Forestry													
5	Manufacturing													

*Continued ...*

II. Capital Expenditure (In Rs. Thousands)													
S No.	Items →	Capital expenditure on assets								Purchase of Land	Purchase of Second hand assets		Change in Stock
		Building	Road	Other Construction	Transport	Machinery	Soft Ware	Animal Stock	Cultivated Assets		Building	Assets	
Industry		1.1	1.2	1.3	1.4	1.5	1.6	1.7	1.8	2	3.1	3.2	4
1	<b>Agri-culture (Irrigation)</b>												
2	<b>Trans-port</b>												
3	<b>Electri-city</b>												
4	<b>Forestry</b>												
5	<b>Manu-facturing</b>												

*Continued ...*

<b>BLOCK-4</b>			
<b>Funds (In Rs. Thousands)</b>			
<b>S. No.</b>	<b>Items</b>	<b>Receipts</b>	<b>Expenditure</b>
1	<b>Loans</b>		
	1.1 Centre		
	1.2 State		
	1.3 Other Local Bodies		
	1.4 Financial Institution		
	1.5 Others		
2	Remittance		
3	Internal Debt		
4	Small savings, Provident fund etc.		
5	Reserve Funds		
6	Deposits and Advances		
7	Suspense and Miscellaneous		
8	Other Funds		
9	Opening Balance		
10	Closing Balance		

*Continued ...*

## **PART II**

<b>Statement: Flow of Funds</b>		
	(Rs. Thousands)	
	<b>2015-16</b>	<b>2016-17</b>
<b>Liabilities</b>		
<b>I. Deposits</b>		
Nonfinancial corporations		
Households and NPISHs		
<b>II. Debt securities</b>		
Banks		
Insurance		
Pension and Provident Funds		
<b>III. Loans and borrowing</b>		
Financial corporations		
Other depository		
corporations Banks		
of which		
Scheduled commercial banks (including regional rural banks)		
Urban co-operative Banks		
Rural co-operative Banks		
Deposit taking primary agriculture co-operative credit societies		
Others (please specify)		
Other financial corporations		
Insurance		
Others (please specify)		
General Government		
Central Government		
State Government		
Other local bodies		
Others (please specify)		
Of which, Small Savings		
<b>IV. Provident and Pension Funds</b>		
<b>V. Reserves and Surplus</b>		
Municipal/ Panchayat Fund		
Earmarked Funds		
Reserves		
<b>VI. Other account payable</b>		
<b>VII. Other Liabilities</b>		
<b>Gross Financial Liabilities</b>		

<b>Statement: Flow of Funds</b>		
(Rs. Thousands)		
	<b>2015-16</b>	<b>2016-17</b>
<b>Assets</b>		
<b>I. Currency and Deposits</b>		
<b>I.A Currency (Cash in hand)</b>		
<b>I.B Deposits</b>		
<b>Short-term (Current Account Deposits)</b>		
Other depository corporations		
Banks		
Scheduled commercial banks (including regional rural banks)		
Urban co-operative Banks		
Rural co-operative Banks		
Others (please specify)		
<b>Long-term (Other than current account deposits)</b>		
Other depository corporations		
Banks		
Scheduled commercial banks (including regional rural banks)		
Urban co-operative Banks		
Rural co-operative Banks		
Others (please specify)		
Others (please specify)		
<b>II. Loans and Borrowing</b>		
Nonfinancial corporations		
Households and NPISHs		
<b>III. Investments</b>		
Central Government Securities		
State Government Securities		
Equity Shares (Endowment funds)		
Units of Mutual Funds		
Debentures and Bonds		
Provident fund, Pension fund and Gratuity fund		
Sinking Funds		
Others		
<b>IV. Other Account Receivable</b>		
<b>III. Other Assets Gross</b>		
<b>Financial Assets</b>		

**Annex 4.3: Flow of Funds Data for Local Bodies in Himachal Pradesh**

			(Rs. Crore)		
<b>Liabilities</b>	<b>2015-16</b>	<b>2016-17</b>	<b>Assets</b>	<b>2015-16</b>	<b>2016-17</b>
I. Deposits	0.00	0.00	I. Currency and Deposits	<b>40.49</b>	<b>30.57</b>
Nonfinancial Corporations	0.00	0.00	I.A Currency(Cash in hand)	0.00	0.00
Household and NPISHs	0.00	0.00	I.B Deposits	<b>40.49</b>	<b>30.57</b>
<b>II. Debt Securities</b>	<b>13.71</b>	<b>15.71</b>	Banks	40.49	30.57
Banks	0.00	0.00	Other (specify)	0.00	0.00
Insurance	0.00	0.00	<b>II. Loans and Borrowing</b>	<b>3.36</b>	<b>4.38</b>
Pension and Provident funds	13.71	15.71	Nonfinancial Corporations	3.20	4.06
<b>III. Loan and Borrowing</b>	<b>1.43</b>	<b>6.65</b>	Household and NPISHs	0.16	0.31
Financial Corporations	0.00	0.00	<b>III. Investments</b>	<b>1051.98</b>	<b>1470.01</b>
Banks	0.07	1.88	<b>IV. Other account receivable</b>	<b>191.89</b>	<b>179.60</b>
Insurance	0.00	0.00	<b>V. Other Assets</b>	<b>-59.73</b>	<b>-172.29</b>
Other(please specify)	0.68	1.18	<b>Gross Financial Assets</b>	<b>1227.99</b>	<b>1512.27</b>
<b>General Government</b>	<b>0.68</b>	<b>3.59</b>			
Central Government	0.37	1.83			
State Government	0.30	1.76			
<b>IV. Reserves and Surplus</b>	<b>935.78</b>	<b>1044.52</b>			
Municipal Funds	23.30	50.38			
Earmarked Funds	877.63	968.30			
Reserves/surplus	34.85	25.84			
<b>V. Other account payable</b>	<b>6.58</b>	<b>66.39</b>			
<b>Vi. Other Liabilities</b>	<b>270.50</b>	<b>378.99</b>			
<b>Gross Financial Liabilities</b>	<b>1227.99</b>	<b>1512.27</b>			

## **Chapter 5**

### **Estimating Flow of Funds at State Level: An Approach and Some Issues**

#### **Section I: Introduction**

5.1 Regional Accounts in India are largely limited to measurement of the Gross and Net Domestic Product based on income originating approach. Further breakdown of the macroeconomic aggregates in terms of consumption, saving, and investment at the state level is challenging because of the lack of data on inter-state trade transactions and factor income flows. Recognizing this, the Committee on Regional Accounts (CRA, 1976) recommended the use of direct data at the state level for preparing macroeconomic aggregates of income and expenditure which could further be used to obtain estimates of saving and inter-state trade as residuals. Though some of the states are preparing estimates of capital formation through expenditure side approach, estimates of saving are not prepared at the state level. Independent efforts for preparing saving and investment estimates have been made in the past largely following the expenditure side approach (Lakhchaura, 2004; Dholakia, 2006; Rajeswari et al., 2009; Sethia, 2016). Measurement of inter-state trade and financial flows are important for examining the extent of integration of regional economies. Sethia (2016) and the recent Economic Survey (2017-18) suggest substantial integration of state economies through inter-state trade, with the estimates for net inter-state trade balance at around 20-25 percent of the Gross State Domestic Product (GSDP) for many states.<sup>18</sup> Applying the international trade theories in a regional context, such large trade balances should be accompanied by combined inter-state flows of factor income payments, net unilateral transfers (through redistributive central fiscal policy or other mechanism), and financial (capital account) transfers, equal in magnitude but opposite in the direction. For an economy of sub-continental size, consisting of states at different stages of development, tracking of inter-regional flows of funds assumes great importance.

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<sup>18</sup>Sethia (2016) uses expenditure approach where trade balance is measured as the saving investment gap. On the other hand, the Economic Survey's trade balance estimates are based on the data collected from returns filed under the recently introduced Goods and Service Tax (GST).

5.2 The use of expenditure side approach in the Indian context is well known for the underestimates generated from the survey results. For example, household consumption surveys conducted by the National Sample Survey Office (NSSO) measure only half of the consumption expenditure as reported in the NAS. This underestimation could be attributed apart from differences in the scope and coverage, to sampling design, recall bias, deliberate underreporting, particularly for the items consumed at higher income level. Hence, any estimates of saving prepared based on the NSS consumption expenditure surveys are also likely to suffer from such limitations.

5.3 The FoF at the state level can provide an alternative approach for estimating savings and inter-state financial flows at the state level, with details at sectoral and instrument level. As the FoF accounts are compiled from the accounts of the institutions of the respective sectors, these are more credible. Since there are two parties to each transaction, households sector accounts derived as a residual based on the accounts of other institutions, are also reliable. Thus, the residual based approach, followed at the national level, can be followed at the regional level as well.

5.4 Though attractive in terms of avoiding measurement issues related to household sample surveys, the compilation of the FoF at state level faces its own conceptual challenges and data gaps. Section 2 examines conceptual challenges involved in defining the FoF at the state level. Section 3 discusses the availability of data and gaps thereof for measuring FoF at the state level. Section 4 concludes the chapter and outlines the recommendations and future course of action.

## **Section II: Conceptual Challenges for Measuring FoF at State Level**

5.5 FoF accounts at the national level are prepared for five institutional sectors, namely, i) Financial Corporations, ii) Non-Financial Corporations, iii) General Government, iv) Households and NPISH, and v) RoW. When similar accounts are to be compiled at the state level, these should encompass transactions of all the sectors in a state with reference to other domestic sectors and the external sector. Here, the domestic sector would refer to sectors within the state, while external sector can be decomposed into Rest of India (RoI) comprising all other states and Rest of the World (foreign

transactions). Under this approach, the first stage of the exercise hinges on the measurement of the sources and uses of funds of the various sectors within a state. At the next stage, one needs to map transactions of the domestic (within state) sector with other states (RoI). Finally, transactions with the foreign sector (RoW) need to be compiled. These three stages can be termed as intra-state (domestic), inter-state (with RoI), and international (with RoW) financial transactions.

5.6 Before examining the availability of data for the state-level FoF, it is imperative to understand the nature of transactions likely to happen at these three stages. Among the institutional sectors, the household sector is likely to have transactions with other sectors within physical boundaries of the same state. Even for the institutional sector of state government, one party to the financial transactions, namely, state government itself, clearly belongs to its own state. However, with the state as the unit of analysis, financial institutions, non-financial corporations, and central government sector pose challenges, given their operations extend beyond boundaries of individual states. In this sense, they are comparable to supra-regional sectors in the parlance of the GSDP compilation. Some illustrative examples can explain nature of the intra-state and inter-state transactions, and provide possible guidance on the approach to be followed for their measurement in FoF context at the state level:

5.7 **Example 1:** Household savings in Rajasthan channelled to single-state non-financial corporation for investing in Gujarat through ODC;s branches in both the states.

At the national level, this example involves three sectors and two transactions, where ODC is party to both the transactions. ODC also acts as an agency that engages in an inter-state transfer of funds through its branches in two states. From the state's perspective, transactions between ODCs' branches need to be captured separately. It is quite difficult to capture, also probably of little interest as well, to know if this project in Gujarat was funded by the saving made in Rajasthan. However, it is possible to know if the ODC sector of a particular state had a deficit or surplus against Rest of India, which requires details on sources and uses on a net basis. Hence, the transaction between two branches of the ODC in different states can be considered as two separate transactions with Rest of India. Thus, the two transactions within the ODC sector along with one

transaction of ODC sector with household and firm each will allow us to capture the entire resource flow through four transactions:

- a) Household deposits money in ODC in Rajasthan.
- b) ODC transfers money from its branch in Rajasthan to-Rest of India (RoI) pool.
- c) ODC branch in Gujarat borrows money from ODC-RoI pool.
- d) ODC lends money to the firm in Gujarat

Of the above three transactions, first and fourth are intra-state transactions, while the middle two are inter-state transactions. The FoF entries for the above transactions can be prepared as follows:

### **FoF Entries for Example**

#### **1 Rajasthan**

Intra-state Transaction		
	Sources	Uses
Household		Deposits
ODC	Deposits	

Gujarat

Inter-state Transaction		
	Sources	Uses
ODC-Rajasthan		Intra-bank Transfer
ODC-RoI	Intra-bank Transfer	

Inter-State Transaction		
	Sources	Uses
ODC-RoI		Intra-Bank Transfer
ODC-Gujarat	Intra-Bank Transfer	

Gujarat		
	Sources	Uses
ODC		Loan
Firm	Loan	

5.8 Database on the banking sector, captured through the BSR system, permits us to capture all the four transactions separately (Inter-state transactions of ODCs to be compiled on a net basis). A similar structure would allow us to capture the flow of resources from households to state governments through the banking system. The more

challenging task would be to analyse transactions of the banking sector with firms that have operations across states or transactions of the ODCs with the central government. We explore these cases below:

**5.9 Example 2:** Household savings in Rajasthan channelled to multi-state non-financial corporations for investing in Gujarat through ODC's. The firm's headquarter and branch of the ODC making the loan transaction are located in Maharashtra.

Multi-state firms may raise resources in the financial centres (Mumbai, Gurgaon) and invest in their projects located in another state. The household savings, deposited in Rajasthan, can be transferred to Gujarat through Maharashtra. Hence, this entire transaction can be divided into five parts:

- a) Household deposits money in ODC in Rajasthan.
- b) ODC transfers money from its branch in Rajasthan to ODC-RoI pool
- c) ODC in Maharashtra raise resources from ODC-RoI pool
- d) ODC lends money to the firm in Maharashtra
- e) Firm transfers money to its unit in Gujarat

5.10 Existing database from the BSR system enables us to capture only the first four steps of these transactions. The FoF entries for these four transactions would be similar to those shown under example 1. It may be noted that role of Maharashtra is limited to bring resources (source) from Rajasthan to be transferred to Gujarat (Use) through ODCs. In this sense, it is similar to the role of financial intermediary institutions which incurs huge liabilities and acquire comparable assets, with little net transactions on their part.

5.11 Details on intra-firm transfers that take place in inter-state context are not available currently. Tracing this node of the transaction is crucial not only from the FoF perspective but also from the saving-investment identity at the state level. Key lies in linking the headquarter/ establishment borrowing in Maharashtra to the establishment making physical investment in Gujarat, where both the establishments belong to the same enterprise. Multi-state firms are unlikely to be part of the household sector, and should be

covered under MCA database (non-financial corporations). For single state firms, it will be sufficient to have a state registration code in the MCA filing to enable state-wise mapping of financial transactions. However, for firms having establishments in multiple states, the registration code will not allow linkages between establishment and state.

5.12 Multi-state non-financial corporations may be engaged in manufacturing, services, and to an extent in agriculture sector as well. In case of the manufacturing sector, the Annual Survey of Industries (ASI) captures details of the profit, loss, and investment at the establishment level. However, the details on financial transactions, other than one carried out by the establishment, would be available only from MCA database. Demand for financial resources at the establishment level arise for making physical investment and financing losses. Profit and net financial liabilities by the firm (which is an aggregate of all establishments of the firm) supply funds to meet these requirements. Establishments of a multi-state firm can be categorized into lender and borrower. Establishments where profits exceed their investment requirement would belong to the former category, who need to lend their surplus (profit minus investment) to other establishments. Borrower establishments are either loss making or their profits are lower than their investment, requiring them to borrow the difference. Surplus generated by the lender establishment plus financial borrowings of the firm should be first lent (uses) to non-financial corporate RoI sector (sources), which will further lend (uses) these funds to the borrowing establishments of the firm (sources) pro-rata on the basis of demand for funds at the establishment level. The concept of constructing non-financial corporate RoI sector is similar to ODC-RoI pool in the Example 1. The idea of borrowing and lending establishments within the firm can also be applied if the firm is a net lender at an aggregate level. In this case, there could be some establishments which are borrower while others which are lender. Lender establishments will channel their funds (uses) to non-financial corporate RoI sector (sources) which will first meet the requirements (uses) of the borrowing establishment of the firm. The leftover surplus can then be used to acquire (uses) financial assets.

5.13 The latest Annual Survey of Industries (ASI) Schedule (2016-17) contains an item, namely CIN. With CIN details furnished by the establishments in the ASI schedule, it may

be possible to map the MCA firm with its establishments in the ASI. Subsequently, all the intra-firm transfers can be taken as transactions within the non-financial sector of the state with the same sector at R01 level. It may be noted that intra-firm transfers, particularly of profits, may be considered of current nature since they do not create corresponding assets and liabilities. However, it is desirable to measure these flows from the perspective of savings and investment at the state level. Linking ASI data with MCA database has an additional advantage of improving the quality of both the database through cross-validation.

5.14 For non-financial corporate sector in the service sector, it may not be feasible to establish linkage between enterprise and establishment under the current scenario. A survey on the service sector, similar on lines with the ASI may help in bridging this missing link. Such standalone service sector survey is desirable even otherwise given the rising contribution of the service sector in the Indian economy, and its utility for the measurement of state domestic product.

5.15 **Example 3:** Households savings in Maharashtra is channelled to the central government through banking sector for financing fiscal deficit

This example can be divided into two transactions.

- a) Household deposits money in ODC's in Maharashtra.
- b) ODC acquires the central government securities.

5.16 The first transaction does not pose a challenge, as the BSR database allows tracing of banking transactions with the household sector at the state level. The second part, where ODC provides resources to the central government, needs to be examined for its conceptual position in the FoF accounts. There are three alternative choices for allocating the central government's liabilities on regional basis a) to the states that benefit from the expenditure financed by the central government's fiscal deficit, b) to the states that are likely to pay taxes in future to repay the central government's liabilities, and c) to consider central government's liabilities as super-regional sector which need not be allocated to any state.

5.17 For the first alternative, one needs to identify the quantum of benefits that each state derives from the expenditure financed by the central government's fiscal deficit. Central government's operations extend across the nation, and it is difficult (though not impossible) to attempt inter-state distribution of central fiscal transfers and expenditures.<sup>19</sup> However, as per the second alternative and in sync with the concept of liability, one should be concerned about which state would be paying the central debt in future rather than which state is receiving the central funds today. Central expenditures are akin to current transfers to the recipient state, with no corresponding liability to pay it back. Hence, if the central government incurs fiscal deficit, then taxpayers implicitly owe the responsibility to pay it back in future. Accordingly, central government's financial liabilities can be allocated among states in proportion to their contribution in central taxes rather than the inter-state pattern of central spending.<sup>20</sup>

5.18 The third alternative is to keep central government as a separate sector and not to allocate it to any state. In the context of GSDP estimation, the sectors for which the national aggregates are not allocated to any state are termed as super-regional sectors; e.g., national defence, foreign embassies, etc. It should be noted that in the context of FoF, the tax payment is considered as a current transfer rather than a financial transaction. From this perspective, taxpayers' liabilities to pay additional taxes in future due to current fiscal deficit need not be considered for the FoF accounts. Resorting to fiscal deficit rather than raising more taxes today can be considered as a choice exercised by the government. Taxpayers must pay their taxes today or tomorrow. Hence, it becomes an intra-sectoral transaction within the taxpayer group. While important from the fiscal perspective, the fiscal deficit can be considered as a super-regional sector for the FoF purposes, requiring no allocation at the state level. Considering the current transfer nature of taxation, we also prefer to follow the third approach. The approach of treating the central government as a super-regional sector should also be applied to the financial assets of the central government. The central government may provide equity/loan funds to public sector undertakings (PSUs) or loans to state governments. These resources

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<sup>19</sup>In many federal economies in the developed world, e.g., Canada, Germany, Spain and Italy, central government's transactions are measured at the state level.

<sup>20</sup>Vaillancourt and Bird (2007) have used this approach to allocate federal fiscal deficit across provinces in Canada.

ultimately belong to the taxpayers who can expect benefits in future in terms of lower taxation (due to non-tax revenues from the financial assets owned by the central government). Similar to the taxes to be paid in future to repay the central government's fiscal deficit, taxpayer's future benefits from the central government's financial assets in terms of lower taxes can be considered as a current transaction, requiring no allocation at the state level for FoF purposes. In the accounts of the counterparty, transaction with the central government will be shown as a transaction with the super-regional sector. On similar lines, RBI can also be shown as super-regional sector in the accounts of the counter-party, and need not be linked to any state.

### **Section III: Data Availability and Gaps**

5.19 With the above conceptual context in the background, we may examine to what extent transactions can be identified at within state, RoI, and RoW levels. This exercise will provide an overview of the data availability, the gaps thereof, and possible ways to address them. This is attempted for each sub-sector, following the sectoral classification of the RBI's FoF accounts.

**Table: 1 Status of Data Availability for Measuring Financial Transactions at the State Level**

(Numbers in parenthesis contain the average<sup>21</sup> share of the sector in sources and uses at the national level)

S. No.	Institution	Comment
1	Financial Corporations (42.4, 46.9)	Sources: Currency, Deposits, Other liabilities  At the national level, based on previous surveys, nearly 90 percent of the currency issued is presumed to be retained by the household sector for financial savings. From the theoretical perspective, both transaction and asset demand for currency can be linked to income. Hence, GSDP can be considered as an indicator for cash holding across states. However, state-wise allocation of cash-holding pro-rata on the basis of GSDP assumes uniform cash/GSDP ratio. To address this concern, state-wise data on cash deposits made during
1.1	RBI (5.6, 5.8)	

<sup>21</sup>Average derived from FoF account for the period from 2011-12 to 2014-15.

S. No.	Institution	Comment
		<p>demonetisation may provide a benchmark on state-specific currency/GSDP ratio. For subsequent years, state-wise cash deposits under demonetisation can be carried forward using the growth rate of GSDP or bank deposits (whichever better correlates with the cash deposits during demonetisation), with all-India currency figures as the controlling total.</p> <p>The state Governments keep deposits with the RBI. Detailed state-wise data may be available from records of the RBI.</p> <p>Similarly, ODCs keep deposits with the RBI. ODCs may be identified by the state-wise deposits<sup>22</sup> taken by the individual ODIs.</p> <p>Other liabilities may remain unallocated.</p> <p>Uses: Debt securities: Debt securities acquired by RBI are largely issued by central government/ foreign govt. or foreign central bank. As discussed in example 3, the former can be considered as a super-regional sector, and the latter is transaction with the RoW which need not be allocated to any state.</p> <p>Ways and Means Advances can be linked to the respective states, for which data can be obtained from the RBI records or Study of State Finances.</p> <p>Loans to ODCs may be allocated based on the state-wise deposits<sup>23</sup> taken by the individual ODIs.</p>

<sup>22</sup> Presuming that these deposits are for CRR requirements or OMO operations where surplus liquidity is parked with RBI, state-wise deposits can be taken as an indicator rather than location of headquarter.

<sup>23</sup> In case these loans are under OMO operations then may be linked with state-wise deposits: Banks may be taking these loans to meet their CRR requirements.

S. No.	Institution	Comment
1.2	Other Depository Corporations (26, 28.4)	<p>Sources: Deposits, Loans and borrowings from the central bank:</p> <p>The RBI survey of ownership of deposits provides two-way classification by State X Ownership of deposits.</p> <p>Uses: Loans to households and non-financial corporations: State-wise loans by type of organization are also available from BSR-1 tabulations. Example 2 suggests that transactions with multi-state firms can be allocated to the state where the establishment of multi-state firm carrying out transaction with ODI is located. Subsequent flow of fund from the one establishment of multi-state firm (e.g. headquarter taking loan) to another establishment (e.g. factory where funds are to be used for investment) are to be mapped as transaction between non-financial corporate sector of the state with non-financial corporate sector Rol.</p> <p>Debt securities of central and state governments: Debt securities of the state governments can directly be attributed to the particular state. Central government debt securities: Same as mentioned for 1.1</p>
1.2.1	Scheduled Commercial Banks (22.1, 24.8)	<p>Sources: Deposits, Loans</p> <p>Deposits: As far as rural co-operatives are concerned their network is generally restricted to one state. For a few multi state Urban Co-operative banks, their deposits may be considered as originated from the state of their headquarters. In the absence of other details, it may be assumed that the depositors are households.</p>
1.2.2	Co-operative Banks and Credit Societies (2.6, 1.9)	<p>Uses: Loans</p> <p>The Apex (State) cooperative bank accounts will give some idea of the funds flowing from the cooperative banks. The Households will get loans primarily from Primary credit societies. Though these data may not be available, the loans obtained by households from cooperative societies for a benchmark year will be available from the decennial All-India Debt and Investment Survey (AIDIS) surveys of the NSSO. For subsequent years, they may be estimated by extrapolating the data for other years.</p>

S. No.	Institution	Comment
1.2.3	Non-Banking Finance Companies – Deposit Taking (0.5, 0.5)	Sources: Deposits, Debt securities, Loans Uses: Loan, Deposits.  In the absence of any other information, it may be assumed that the operations of the NBFCs are restricted in the state where their registered office is located - information on this may be available with the RBI. The required details may be compiled accordingly.
1.2.4	Housing Finance Companies – Deposit Taking (0.8, 1.3)	Sources: Deposits, Debt securities, Loan Uses: Loan, Deposits.  In the absence of any other information, it may be assumed that the operations of the HFCs are restricted in the state where their registered office is located - information on this may be available with the National Housing Bank. The required details may be compiled accordingly. HDFC may be requested to provide this information state-wise.
1.3	Other Financial Corporations (10.9, 12.7)	
1.3.1	All India Financial Institutions (AFI), State Finance Corporations, State Industrial Development Corporations (0.9, 1.1)	Sources: Deposits, Debt securities, Loan Uses: Loan, Deposits  For AFIs, the data on state-wise operation may be called for. Operation of State level organisations may be assumed to be within the State of its location.
1.3.2	Non-Banking Finance Companies – Non-Deposit Taking (2.5, 3.4)	Sources: Debt securities, Loan, Equity Uses: Loan  Same as 1.2.3.
1.3.3	Housing Finance Companies – Non-Deposit Taking (0.3, 0.4)	Sources: Debt securities, Loan Uses: Loan  Same as 1.2.4

S. No.	Institution	Comment
1.3.4	Insurance (4.4, 5)	<p>Sources: Insurance premium State-wise data on new life insurance premium collected is available from IRDA- Handbook on Insurance Statistics. First-year premiums account for nearly 35 percent of the gross premium collection. With the introduction of GST, online payments of renewals are tracked to the location of the office where the policy is registered and for offline mode, it is accounted for by the place where it is received. IRDA /insurance companies may be requested to provide this data.</p> <p>Given that premium paid by employers might get accounted at corporate offices, it is useful to link insurance policies with Aadhaar. Insurance company may be required to maintain Aadhaar number of each beneficiary in a group, which can subsequently help in linking the group premium to individuals spread across states. It is also desirable to estimate the size of the corporate accounts in the total premium collection to understand the quantum of this phenomenon.</p> <p>State-wise collection of the gross amount of non-life premium is available from IRDA –Handbook. Non-life insurance is largely of current nature, with a little saving component. Actuarial component of saving, if any, may be worked out.</p> <p>Uses: Debt securities of central and state governments: Debt securities of the state governments can directly be attributed to the particular state. Central government debt securities: Same as mentioned for 1.1</p> <p>Deposits: BSR data</p> <p>Equity and corporate debt: Data on firms for which equity/corporate debt is held need to be obtained from the insurance companies. Firm level data can be linked to the establishment following the approach mentioned in Example 2.</p>
1.3.5	Mutual Funds (2.2, 2.3)	<p>Sources: Investment, As regards to Mutual Funds, the UTI office may have the record of amounts invested in units collected in the respective state. Or the UTI office in Mumbai may have this information. Similar data should be collected from the other Private mutual funds within a state.</p> <p>Uses: Debt securities, Equity: As mentioned for loans in 1.3.4</p>

S. No.	Institution	Comment
1.3.6	Provident Funds and Pension (Non-government) Funds (0.5, 0.5)	<p>Sources: Pension entitlement, Contribution towards Provident Funds</p> <p>The regulatory authorities of Pension and Provident Funds may be approached to obtain the state-wise data. EPFO has data on circle wise contribution. PFRDA may segregate contributors to the NPS system state-wise.</p> <p>Uses: Debt securities, Equity. As in 1.3.4</p>
2	Non-financial Corporations (31.8, 20.2)	<p>Sources: Loan, Equity</p> <p>As explained in Example 2, linkages between ASI and MCA database through CIN number can be used for manufacturing sector. For the service sector, it may not be feasible to establish linkage between enterprise and establishment under the current scenario. A survey on the service sector, similar on lines with the ASI may help in bridging this missing link.</p> <p>Uses: Investments (financial), Trade Credit, Other Assets. Same as for Sources</p>
2.2	Private Non-financial Corporations (28.3, 18.6)	<p>Sources: Loan, Equity, Other Liabilities.</p> <p>Uses: Loan, Equity, Other Assets. Same as 2.1</p>
3	General Government (16.5, 1.1)	
3.1	Central Government (11.5, 0.3)	<p>Sources: Debt securities, Loan</p> <p>Uses: Deposits, Equity, Currency – Super Regional sector, not to be allocated to any state</p>
3.2	State Governments (5, 0.7)	RBI study on state budgets may provide the requisite information. The ownership pattern of central and state government securities is available from the RBI studies. Ownership pattern of securities on individual states will be required rather than all state together as currently available in public domain. City corporations may be included, for which the data from the concerned corporation may be available.

S. No.	Institution	Comment
4	Households and Non-profit Institutions Serving Households (5.8, 22)	<p>The sources and uses of this sector are derived as a residual for most of the items. The reliability of these accounts depends upon the credibility of the estimates available from other sectors. We do not have adequate data at the state level for NPISH. The sources and uses of funds of the Households will be as under:</p> <p>Sources: Borrowings from commercial banks: BSR data.  Borrowings from cooperative banks (mostly from Primary cooperative banks); Data may not be available state wise.  Possibly, the data thrown up by the decennial surveys on debt and Investment conducted by the NSSO may be used of for a benchmark year and extrapolated for other years with moving indicators. The survey data under reference gives information on assets and liabilities of the households, but the efficiency of such estimates at state level needs examination.</p> <p>Uses: a. Currency: Can be derived as explained earlier under RBI sub-sector, b. Deposits with commercial banks: BSR data, c) Insurance: As explained in insurance sub-sector. d) Mutual funds: As explained in Mutual fund sub-sector.</p>
5	Rest of the World (3.5, 9.9)	<p>Sources: Equity, Debt Securities, Deposits.  Uses: Equity, Debt Securities, Deposits.</p> <p>NRI deposits, External commercial borrowings, Foreign Direct Investment (FDI) are the major items, and state-specific details in this regard need to be carved out from the records of the RBI, to provide a skeleton frame work of RoW vis-a-vis the state government under reference.</p>

#### **Section IV - Recommendations and Future Directions**

5.20 The above analysis gives a view of the data sources, availability and the data gaps for the compilation of FoF at the state level. The following can be the roadmap for building FoF accounts at the state level:

- i) The Financial Institutions account for over 40 per cent of the total sources of funds. Hence, the feasibility of building up other sector accounts at least partially from this information could be attempted. It is desirable to begin with the accounts for Scheduled Commercial Banks. BSR data provides details on the deposits and credit for this sector. Survey on ownership of central and state government securities can provide details on another major use of the funds by the financial sector. The RBI should be treated as a super-regional sector, which need not be allocated to any state. The transactions by other institutional sectors with the RBI should be treated as transactions with a super-regional sector.
- ii) At next stage, accounts for state government, insurance sector, and other financial institutions can be prepared. This, along with counterpart transactions with household sector, will cover more than half of the FoF transactions at the national level. This exercise will provide details on net financial resources position at the state level, excluding non-financial corporate sector. The Central Government should be treated as a super-regional sector, which need not be allocated to any state. The transactions by other institutional sectors with the Central Government should be treated as transactions with a super-regional sector.
- iii) At the current stage, transactions with non-financial corporate sector can be kept separately without linking it to a particular state. Missing link of the non-financial corporations in the manufacturing sector can be mapped as and when linking of MCA and ASI databases become feasible. For Non-financial corporations in the service sector, a survey on the service sector, similar on lines with the ASI may help in bridging this missing link. Such standalone service sector survey is desirable even otherwise given the rising contribution of the service sector in the Indian economy, and its utility for the measurement of state domestic product.
- iv) The approach recommended for preparing the FoF at state level relies on sectoral data sources which contain information for all states together, e.g., BSR, ASI, AIDIS, etc. There will be economies of scale if the FoF for all states

are prepared together rather than done individually at the state level. Given its expertise in preparing the FoF accounts of at the national level, the RBI would be best placed to carry out this exercise at the state level. To begin with, the state level FoF accounts should be prepared on an annual basis for the next five years. The frequency can be increased later depending upon the statistical developments. Time lag required to prepare the state level FoF accounts would depend upon the time-lag with which the input data are released. While the input data for the financial sector and government sector can be gathered within a time-gap of 12 months, the ASI data are released 2 years after the reference year. Hence, the time-lag for state level FoF accounts can be kept at ASI (24 months) plus 6 months. The time lag can be reduced later depending upon the statistical developments.

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## **Chapter 6**

### **Recommendations**

6.1 This Chapter summarises the recommendations of the Committee. The Committee recommends that RBI should prepare and publish the Flow of Funds (FoF) estimates at the national and state levels. The national level estimates should be on an annual and quarterly basis, whereas the state level estimates may be on an annual basis for the next five years. The Central Statistics Office (CSO) may continue to prepare the national level estimates of saving and capital formation as part of the national accounts. However, the CSO and the RBI should work closely with each other to reduce if not eliminate the discrepancies in the estimates in the NAS and the FoF respectively and provide clear explanations, as transparently as possible, wherever the discrepancies cannot be avoided. Priority may be accorded to strengthen the source systems so that the prescribed standards for FoF compilation by the G20 group by 2021 can be met. The following are the specific recommendations for improvements.

#### **Co-operative Sector**

6.2 All the State/ UT Governments may be made responsible for collection of co-operative sector data, as the 97th Constitutional amendment empowers them to do so. The Registrars of Co-operative Societies may be made the nodal agency for the same and MOSPI may be involved in guiding them. Considering NABARD's vast experience in this area, it may coordinate a meeting of representatives from some select Registrars of Co-operative Societies, the RBI, and the CSO to kick start the process. [Para 3.4 (a) (i)]

6.3 NABARD may provide projections on co-operative sector data items as required in preparation of the FoF accounts; to start with, estimation of household sector's deposits with the co-operatives at the State level may be attempted. [Para 3.4 (a) (ii)]

6.4 PACS data may be sourced from NAFSCOB through NABARD. [Para 3.4 (a) (iii)]

### **Micro-Finance Institutions**

6.5 For FoF data on Micro-Finance Institutions (MFIs), their apex bodies like Sa-Dhan, which has around 180 members, may be approached. [Para 3.4 (b)]

### **Non-Financial and Financial Corporations**

6.6 SNA recommends reporting of 'equity' as, 'listed shares', 'unlisted shares', and 'other equity'. Presently, information on listed shares is available with the SEBI. As such, unlisted shares information may be obtained by deducting the amount of listed shares from total shares (as provided by the MCA). As the share of 'other equity' is expected to be negligible at present, it may be ignored. [Para 3.4 (c) (i)]

6.7 SEBI may explore collecting ownership details of holdings in respect of corporate debt as well as equity through the depositories/ custodians (NSDL/CDSL); and also from Registrars and Transfer Agents (RTA). If necessary, depositories/ custodians/ RTAs may be asked to maintain broad economic sector classification of security holders.

[Para 3.4 (c) (ii)]

6.8 However, from the long-term perspective, the MCA should capture ownership details (economic sector-wise) of equity/ debt instruments holdings for each company (both financial and non-financial) through Form MGT-7 with necessary changes. Details of 'other equity' may also be captured. [Para 3.4 (c) (iii)]

6.9 MCA may provide information on economic activity and equity ownership as available in Forms AOC-4 and MGT-7 to the RBI, which may be used for classification of companies into financial and non-financial; and also public, private and foreign controlled. [Para 3.4 (c) (iv) and (v)]

6.10 Information on employees' stock options as collected by the MCA from companies in Form AOC-4 and MGT-7 may be provided to the RBI, who may explore using the same for FoF compilation. [Para 3.4 (c) (vi)]

6.11 As recommended by the WG, nature of data available with CCIL and SEBI with regard to OTC and exchange-traded derivative transactions, respectively, may be

examined from the view point of incorporating the same in the FoF Accounts. The matter may be pursued vigorously. [Para 3.4 (c) (vii)]

6.12 Rigorous monitoring may be done by the MCA for submission of Forms AOC-4 and MGT-7 by all active companies. [Para 3.4 (c) (viii)]

6.13 The present balance sheet structure prescribed by MCA provide details of short/ long-term loans, debt securities and investments, and these are being published in Company Finances Studies on non-financial/ financial corporations conducted by the RBI (DSIM). These details may be included in FoF accounts as prescribed in SNA 2008.

[Para 3.4 (c) (ix)]

6.14 Till the time required identifier for Water Users' Associations, Farmer Producer Organisations and 'Micro, Small and Medium Enterprises' be made in the MCA database, the NABARD may provide required information from such institutions promoted or financed by them. [Para 3.4 (c) (x)]

6.15 Alternative investment funds (AIFs) may be included in the sector "Other financial intermediaries". SEBI should collect data on AIFs and provide the same to the FoF data compilers. [Para 3.4 (c) (xii)]

6.16 Coverage of non-Government non-financial/ financial corporations in MCA database is still incomplete. Based on the exploratory exercise carried out by the Committee, the data compilers (both of national accounts as well as FoF) may use appropriate statistical methods, such as, growth rates or regression models to estimate the balance sheet variables, in order to reduce the shortcoming/ errors in present PUC based blow-up method. [Para 3.16]

6.17 SNA 2008 recommended bifurcation of deposits into transferrable and other deposits. While the definition of transferrable deposits does not strictly apply, bifurcation of bank deposits into 'current and savings' and 'term' may be shown. [Para 3.4 (c) (xiv)]

6.18 As prescribed in the SNA 2008, preparation of FoF accounts for Money Market MFs and non-Money Market MFs may be prepared separately. [Para 3.4 (c) (xv)]

### **Insurance Sector**

6.19 IRDA should provide the data on life and non-life insurance (both – public and private) to the RBI (DEPR) in mutually agreed format. In respect of data gaps, if any, required for compilation of FoF, the same may be captured by the IRDA. [Para 3.4 (d)]

6.20 The RBI (DEPR) should use the actual data on non-life insurance companies as received from the IRDA, instead of using the ratio derived from life insurance sector data. [Para 3.4 (d)]

### **Government Sector**

6.21 RBI (IDMD) may provide ownership of Central and State Government Securities as per the institutional categories required for compilation of the FoF. [Para 3.4 (f) (i)]

6.22 CSO/ MoSPI may collect data on local bodies as per the proforma devised by the Committee from the DES in each state and share the same with the RBI for FoF compilation. They should rigorously follow-up with non-responding States for further improving the coverage. [Para 4.27 (i)]

6.23 The Government may set-up a High Level Committee (comprising members from Urban Development Department, Ministry of Panchayati Raj, Ministry of Statistics and Programme Implementation, RBI, Directorate of Economic and Statistics of select states, DMAs, select large municipal corporations) to fine tune the format, if required for meeting the data requirements of all stakeholders. [Para 4.27 (ii)]

6.24 Necessary software may also be developed for capturing this data from LBs and it may be made mandatory to all LBs (rural as well as urban) to report the data in the prescribed forms. Once, the system is developed, the responsibility of continuous monitoring of data may be assigned to the respective DES. CSO and RBI may access the system to get desired data as required for national accounts and Flow of Funds accounts. [Para 4.27 (iii)]

6.25 The National Informatics Centre may, in coordination with the Ministry of Panchayati Raj (MoPR), may device National e-Panchayat system that will link/ integrate the information pertaining to RLBS available in all the states (including Autonomous District Council (ADC) States). [Para 4.27 (iv)]

6.26 For better accessibility and uniformity, MoPR may host the National e-Panchayat system on their website. [Para 4.27 (v)]

6.27 As is done for MGNREGS, some provision for ‘Administrative Cost’ may be made either in the Central Finance Commission (CFC) or the State Finance Commission (SFC) or in both to help Gram Panchayats (GPs) to maintain their financial accounts as per the prescribed system. [Para 4.27 (vi)]

6.28 Necessary trainings may be arranged at periodic intervals for manpower in local bodies for preparing and maintaining accounts on double entry book-keeping basis. Necessary training may also be arranged for those responsible for reporting and maintaining of data in software. [Para 4.27 (vii)]

6.29 The Fifteenth Finance Commission may be approached to involve CSO/ RBI in structuring any survey of rural local bodies undertaken by them so that the results of the survey may be used at a later stage in compilation of NAS/ FoF accounts.

[Para 4.27 (viii)]

### **Rest of the World**

6.30 While BoP data may continue to be used for FoF purpose, both sets of data (IIP and BoP) may be presented separately for reference purpose. [Para 3.4 (g)]

### **Statistical Discrepancies in the RBI and the CSO Estimates**

6.31 As regards statistical discrepancies in data released by the CSO (in NAS) and the RBI (in FoF), differences on account of data sources and their cut-off dates or otherwise may be reconciled to the extent possible. Further, wherever, it is not possible to reconcile the differences, it may be stated upfront in the publications with complete transparency. The methodological documents for preparation of flow of funds and national accounts may also cover reasons for differences in two data sources. The CSO and the RBI may exchange notes before release of the national accounts and the FoF, to reconcile inconsistencies between the two sets of data. [Para 3.21]

### **Compilation of Quarterly FoFs Accounts**

6.32 Quarterly FoF accounts may follow the methodology used in compilation of annual FoF Accounts. [Para 3.26]

6.33 Monthly budget reviews of the Central Government along with data on government securities/ state development loans from the RBI (IDMD) may be used to prepare FoF estimates on general government sector. [Para 3.27 (c)]

6.34 SEBI may prescribe submission of quarterly statement of assets and liabilities by the listed companies (half-yearly, as of now). [Para 3.27 (e)]

6.35 RBI (DEPR) may prepare quarterly FoF accounts for household sector on a regular basis with gradually increasing the data coverage. [Para 3.28]

6.36 While availability of data may be an issue, estimations/ projections from the annual data may be made using appropriate benchmarks for instruments/ sectors. [Para 3.28]

6.37 The statistical discrepancies arising on account of the quarterly and the annual accounts may be adjusted at the time of compilation of annual FoF accounts. [Para 3.29]

### **Others**

6.38 The feasibility of compiling and publishing separately the ‘valuation account’ and the ‘other changes in volume account’ may be explored. Further, generation of “Reconciliation Table” to record discrepancy between the stocks and the flows may also be examined. [Para 3.4 (h) (i)]

6.39 As per the recommendation of G20 DGI, data for all the target sectors on all the target instruments need to be provided by the G20 countries by 2021. Priority may be accorded to strengthen the source systems required for the same. [Para 3.4 (h) (ii)]

6.40 Considering the significant international attention being paid to the implementation of agreed data templates through outreach, technical assistance, and training, the compilers from the National Account Analysis Division of DEPR, RBI and CSO, MoSPI may be given adequate training and exposure. [Para 3.36 (v)]

6.41 Provisional annual FoF accounts may be released within 9 months and provisional quarterly FoF may be released within 4 months from the reference dates. Revised annual accounts, however, may be released within 12 months from the reference date.

[Para 3.36 (i) & (iii)]

6.42 Methodologies for compilation of provisional/ revised data (including use of estimations/ projections) from the primary source of data may also be released.

[Para 3.36 (ii)]

6.43 Improvement in the format for release of FoF data can be thought of in line with international best practices - while the annual data could be more detailed, the quarterly data could be abridged. [Para 3.36 (iv)]

6.44 As the FoF is derived from primary accounts of concerned institutions, audit of the primary accounts should be a priority. [Para 3.37]

### **Database Maintenance and Dissemination**

6.45 Existing databases maintained by all the regulators may be modified to add additional fields (dimensions) required for unique identification of individuals/ entities and their locational details up to the level of village/ town. Creation of a data warehouse by each regulator (if not already done) is suggested where the above data can be stored following the newly added dimensions. [Para 3.32 and 3.33]

6.46 The data warehouses maintained by various regulators/ data compilers of official statistics need to follow good data governance architecture, maintain appropriate masters and should be capable of generating well defined audit trails with proper explanations in the metadata. Feasibility of a virtual integrated data warehouse networks may be explored by linking data warehouses maintained by various regulators. [Para 3.34]

6.47 Statistics on institutional sectors needs to be strengthened by every official data compilers/ regulators/ supervisors to generate higher frequency data. [Para 3.35]

6.48 Possibilities to conduct annual surveys in line with BSR for collecting data from NBFCs and cooperative institutions may be explored by the RBI (DNBS) and the

NABARD.

[Para 3.35]

## **Flow of Funds at State Level**

6.49 As the financial corporation sector account for over 40 per cent of the total sources of funds, feasibility of building up other sector accounts at state level at least partially from this information may be attempted. BSR system for the scheduled commercial banks which provides state-wise/ institutional sector-wise details on the deposits and credit together with the survey on ownership of central and state government securities conducted by the RBI (IDMD) can provide details of major use of funds by the financial sector. The transactions by other institutional sectors with the RBI should be treated as transactions with a super-regional sector. [Para 5.20 (i)]

6.50 At next stage, accounts for state government, insurance sector, and other financial institutions can be prepared. This, along with counterpart transactions with household sector, will cover more than half of the FoF transactions at the national level.

[Para 5.20 (ii)]

6.51 The Central Government should also be treated as a super-regional sector, which need not be allocated to any state. The transactions by other institutional sectors with the Central Government should be treated as transactions with a super-regional sector.

[Para 5.20 (ii)]

6.52 At the current stage, transactions with non-financial corporate sector can be kept separately without linking it to a particular state. Missing link of the non-financial corporations in the manufacturing sector can be mapped as and when linking of MCA and Annual Survey of Industries (ASI) databases become feasible. [Para 5.20 (iii)]

6.53 For Non-financial corporations in the service sector, a survey on the service sector, similar on lines with the ASI may be conducted. Such standalone service sector survey may serve other purposes as well like the measurement of state domestic product.

[Para 5.20 (iii)]

6.54 Given its expertise in preparing the FoF accounts of at the national level, the RBI would be best placed to carry out this exercise at the state level. To begin with, the state level FoF accounts should be prepared on an annual basis for the next five years. The frequency can be increased later depending upon the statistical developments.

[Para 5.20 (iv)]

6.55 Time lag required to prepare the state level FoF accounts would depend upon the time-lag with which the input data are released. While the input data for the financial sector and government sector can be gathered within a time-gap of 12 months, the ASI data are released 2 years after the reference year. Hence, the time-lag for state level FoF accounts can be kept at ASI (24 months) plus 6 months. The time lag can be reduced later depending upon the statistical developments.

[Para 5.20 (iv)]