

*Quarterly Estimates of Households' Financial Assets and Liabilities**

Household sector is net financial surplus sector in the economy. Availability of higher frequency information about financial health of this sector is, therefore, crucial for assessment of macroeconomic conditions of the Indian economy. Present article is an attempt to generate preliminary estimates of financial assets and liabilities of the household sector on a quarterly basis. Results indicate that financial assets of the Indian households are predominantly in the form of bank deposits followed by life insurance. On the liability side too, commercial banks are the largest source of credit. Shift in the financial portfolio of the sector was observed in Q3:2016-17 in the wake of demonetisation.

I. Introduction

Households play a vital role in the functioning of an economy as factors of production, as consumers, and as a source of financing for investment through saving. Accordingly, financial conditions of households assume crucial importance in the context of overall financial stability. The *Financial Stability Report* of the Reserve Bank of India (RBI) conducts a bi-annual systemic risk survey, for which financial saving of households is a crucial variable under the macroeconomic risks category.

Data on annual household saving are published by the Central Statistics Office (CSO) in its end-January release titled '*First Revised Estimates (FRE) of National Income, Consumption Expenditure, Saving and Capital Formation*', and revised in the subsequent annual releases. Information on financial

assets and liabilities of the household sector are also available in the *Flow of Funds (FoF) Accounts of the Indian Economy*¹ published annually by the RBI on a 'from-whom-to-whom' basis consistent with the United Nations System of National Accounts (SNA) 2008. In terms of the FoF, households are traditionally a financial surplus sector and based on the FoF compilations, the RBI has been publishing preliminary estimates of annual household financial saving in its Annual Report, five months ahead of the CSO release. Higher frequency information on this critical variable is desirable to support a closer assessment of macroeconomic conditions, especially in identifying the sectoral linkages, spillovers, and in tracing the transmission of potential shocks across sectors.

This is the first release of quarterly data on household financial assets and liabilities, as a precursor to our endeavour to move towards quarterly compilation of FoF accounts. This article presents a mapping of financial assets and liabilities of the household sector on a quarterly basis following the FoF approach for the period Q1:2015-16 to Q2:2017-18. The rest of the article is divided into two sections. Section II discusses preliminary estimates of quarterly financial assets and liabilities of the household sector at the aggregate level. Section III presents instrument wise developments. Section IV concludes. The methodology and data sources, as well as a tabular presentation of instrument-wise estimates of household financial assets and liabilities are given in the Annex.

II. Financial Assets and Liabilities of Households

The household sector holds its financial assets mainly in the form of currency, deposits, investments in debt securities, equities, mutual fund units, insurance and pension funds, and small savings. Liabilities are mostly in the form of loans and borrowings from

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¹ Flow of Funds Accounts of the Indian Economy: 2015-16 was released in the RBI Bulletin, August 2017.

Table 1: Households Financial Assets and Liabilities

(Amount in ₹ billion)

	2015-16				2016-17				2017-18	
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2
Net Financial Assets (A-B)	4,689.1	1,685.0	2,507.8	2,568.4	5,037.3	4,593.4	-2,812.4	6,061.3	2,289.0	3,403.9
	<i>14.5</i>	<i>5.0</i>	<i>7.2</i>	<i>7.0</i>	<i>14.0</i>	<i>12.4</i>	<i>-7.3</i>	<i>14.8</i>	<i>5.8</i>	<i>8.3</i>
A. Gross Financial Assets	5,109.9	2,337.8	4,374.3	3,555.0	6,026.2	5,948.1	-4,245.7	8,912.7	2,874.9	5,578.5
	<i>15.8</i>	<i>7.0</i>	<i>12.6</i>	<i>9.6</i>	<i>16.7</i>	<i>16.0</i>	<i>-11.0</i>	<i>21.8</i>	<i>7.3</i>	<i>13.6</i>
B. Financial Liabilities	420.7	652.9	1,866.5	986.6	988.9	1,354.7	-1,433.3	2,851.4	585.9	2,174.5
	<i>1.3</i>	<i>1.9</i>	<i>5.4</i>	<i>2.7</i>	<i>2.7</i>	<i>3.6</i>	<i>-3.7</i>	<i>7.0</i>	<i>1.5</i>	<i>5.3</i>
<i>Memo item:</i>										
GDP	32,416.9	33,540.9	34,749.3	36,933.2	35,984.9	37,153.5	38,502.7	40,896.1	39,297.3	40,882.9

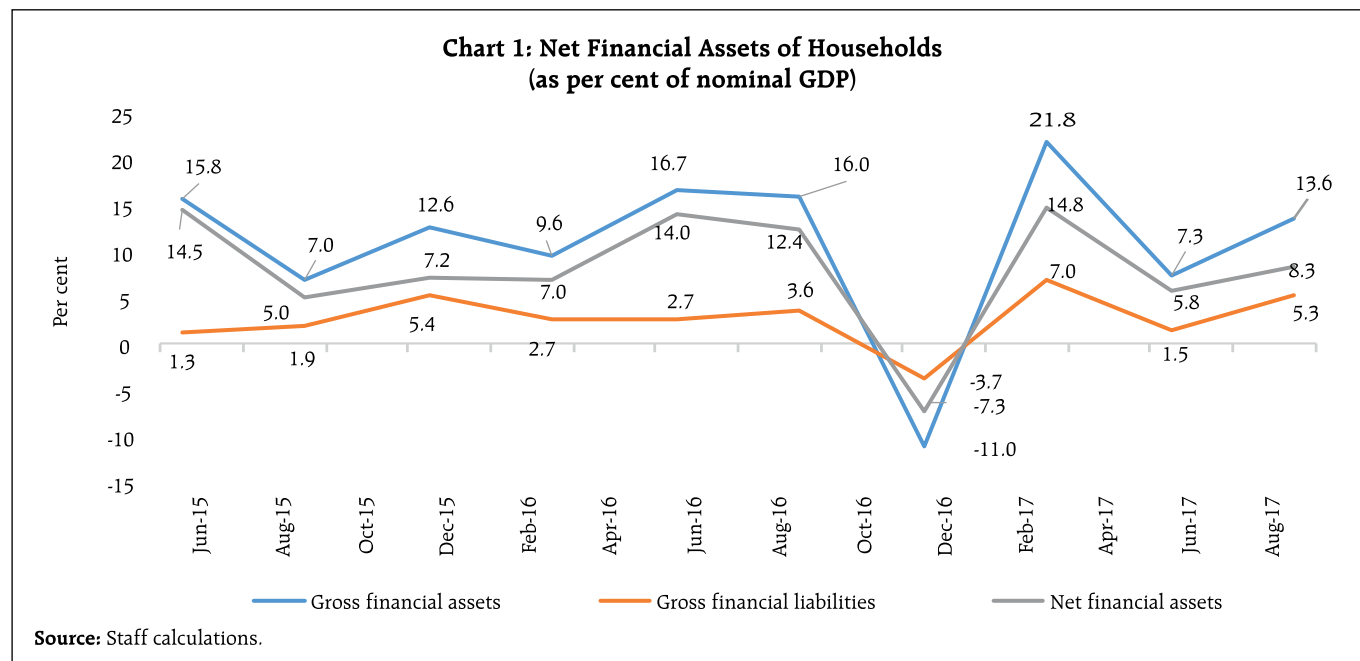
Note : Figures in italics are as per cent to GDP.**Source:** Staff calculations and CSO.

banks, housing finance companies (HFCs) and non-banking financial corporations (NBFCs).

Indian households are generally net savers and suppliers of financial resources for the rest of the economy. However, net financial assets² of the households turned negative (-7.3 per cent of Gross Domestic Product (GDP)) in the third quarter of 2016-17, reflecting the transitory effects of demonetisation³. With subsequent remonetisation, the household sector's net financial assets

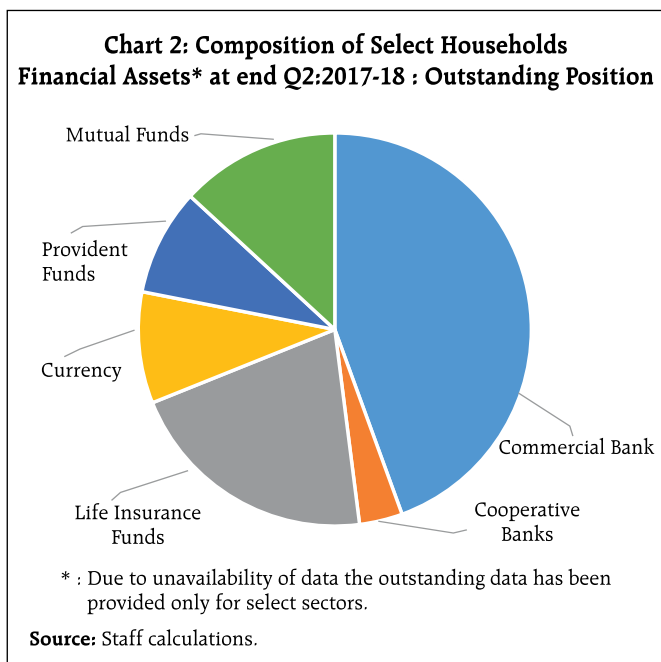
turned around and in the fourth quarter they amounted to 14.8 per cent of GDP. In 2017-18, net financial assets of households are estimated at 8.3 per cent of GDP in Q2, up from 5.8 per cent of GDP in Q1 (Table 1).

The quarterly rate of net financial assets displays a high degree of volatility revealing the shifts in preferences of households for the various instruments on both the assets and liabilities side, which usually does not get captured in the annual data (Chart 1).



² Ratio of change in quarterly net financial assets with GDP is calculated with quarterly GDP. However, all outstanding numbers are normalized with annual GDP.

³ The Government of India vide their Notification No. 2652 dated November 8, 2016 have withdrawn the Legal Tender status of ₹ 500 and ₹ 1,000 denominations of banknotes of the Mahatma Gandhi Series issued by the Reserve Bank of India till November 8, 2016.



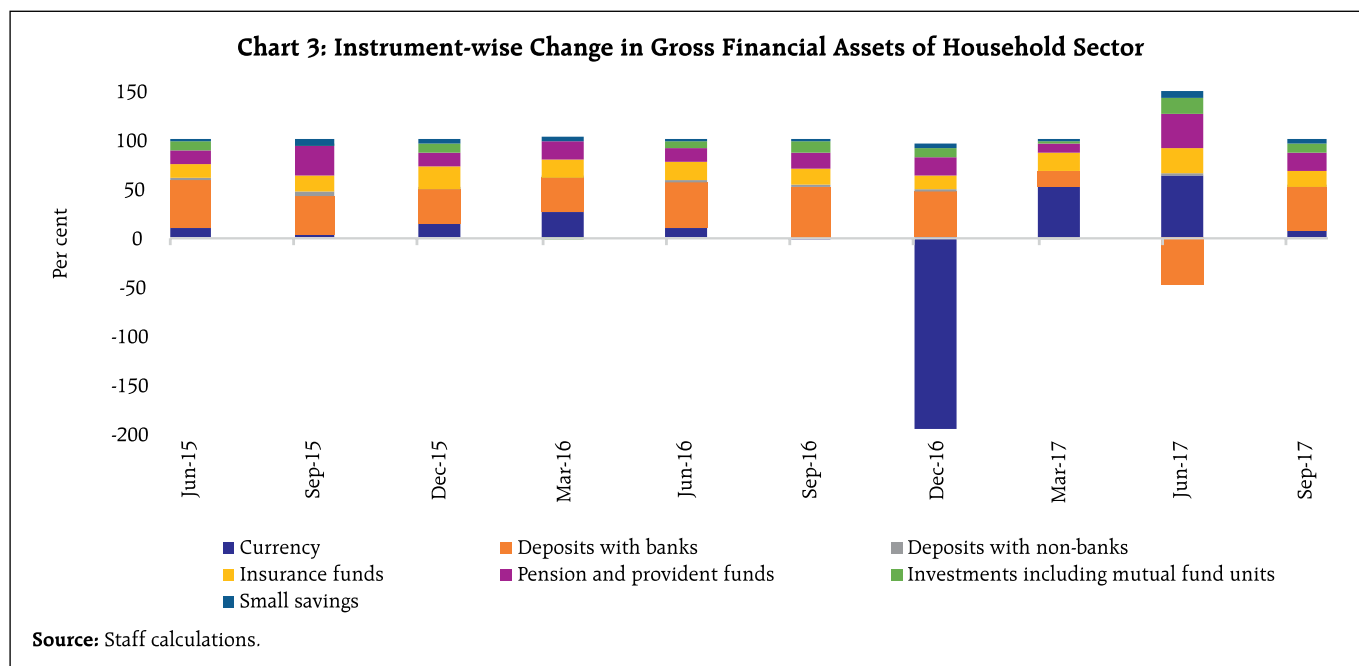
III. Instruments of Households Financial Assets and Liabilities

Outstanding financial assets⁴ of households in select instruments, namely, currency, bank deposits, life insurance funds, mutual funds, pension and provident funds display some interesting trend

(Annex II: Table 3). Deposits with banks have remained the major form of financial assets, with the share of outstanding deposits with commercial banks being the highest, followed by insurance funds and currency, at the end of Q2: 2017-18 (Chart 2).

Aggregate deposits with banks and non-banks increased in Q2:2016-17 to 8.6 per cent of GDP from 8.1 per cent in the previous quarter, possibly reflecting the impact of the release of the 7th Central Pay Commission (CPC) award of salaries and pensions as well as mobilisation of deposits under the income declaration scheme.

Instrument-wise analysis of assets indicates that there was a major shift in the asset classes of the households in the wake of demonetisation. Currency with households contracted sharply in Q3:2016-17 (Chart 3). The contraction in currency was not matched by a proportionate increase in deposits due to (i) the redemption of Foreign Currency Non-Resident (Bank) (FCNR(B)) deposits; (ii) repayment of loans with specified bank notes (SBN); and



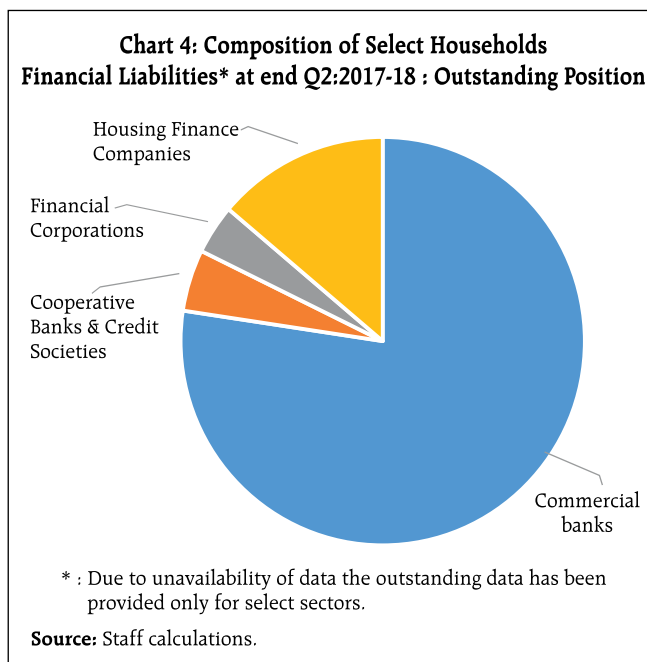
⁴ Due to unavailability of data the outstanding data has been provided only for select assets.

(iii) repayment of outstanding bills (electricity, property tax, telephone bills) with SBNs⁵.

In Q4:2016-17, currency holdings spurted following remonetisation, going up to 11.1 per cent of quarterly GDP from (-) 21.5 per cent in Q3:2016-17, while aggregate deposits went down to 3.6 per cent in Q4:2016-17 from 5.4 per cent in Q3:2016-17.

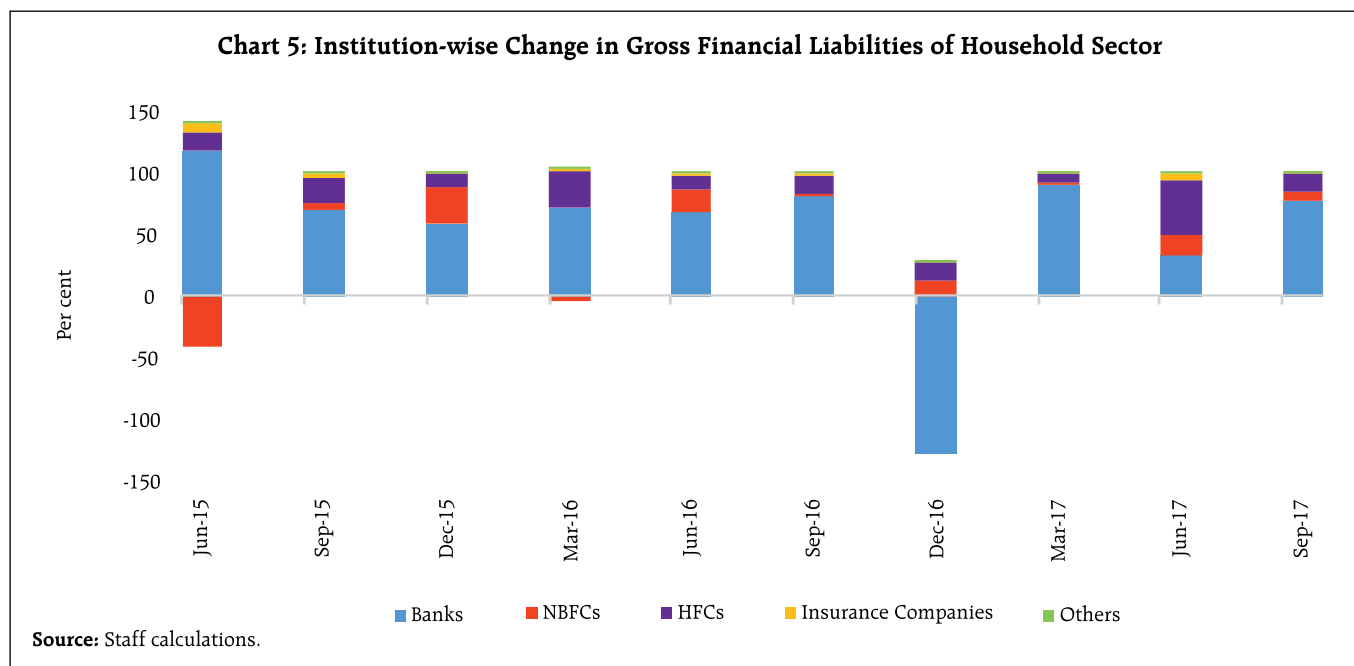
In the first two quarters of 2017-18, assets in the form of currency continued to move towards its normal levels. While, currency with the public rose to 1.0 per cent of GDP in Q2:2017-18, aggregate deposits was 5.9 per cent of GDP. Pension funds and mutual funds picked up in 2017-18 and their shares in GDP were 0.6 per cent and 1.4 per cent in the second quarter, respectively.

In liabilities side, the largest component in the household sector's financial liabilities is generally loans and borrowings from commercial banks (Annex II: Table 3). At the end of Q2:2017-18, the share of outstanding loans from commercial banks remained the highest, followed by the HFCs, NBFCs, cooperative banks and credit societies, in that order (Chart 4).



Borrowings of households from the corporate sector and general government remained negligible.

Liabilities in the form of borrowings from banks turned negative post-demonetisation as demonetised currency was used to pay back loans (Chart 5). Post remonetisation, borrowings from banks recovered to 6.3 per cent of GDP in Q4:2016-17 from a low



⁵ RBI Annual Report 2016-17.

of (-) 4.8 per cent of GDP in Q3:2016-17. The flow of gross financial liabilities increased to 5.3 per cent in Q2:2017-18 from 1.5 per cent in Q1: 2017-18 .

IV. Conclusion

The quarterly estimates of households' financial assets and liabilities for the period Q1:2015-16 to Q2:2017-18, using flow of funds approach and based on information available in financial statements of counterparty sectors, show some interesting observations which are not visible in the annual data. Instrument-wise analysis of assets indicates that there was a shift in households' financial assets portfolio in Q3:2016-17 post demonetisation. The assets holdings of households

reverted to normal levels in subsequent quarters. At outstanding level, households' financial assets are mainly in form of bank deposits with commercial banks as the largest suppliers of credit. Furthermore, pension funds and investment funds picked up in Q2:2017-18.

References:

OECD (2017), "Understanding Financial Accounts", Edited by Peter Van De Ven and Daniele Fano, OECD Publishing, Paris.

Rangarajan, C. (2009), "Report of the High Level Committee on Estimation of Savings and Investment ", RBI.

Annex I: Data Sources and Methodology

From a statistical point of view, it is important to note that the data on households are derived from a horizontal balancing procedure (OECD 2017). In this process, data of households are based on the information available in counterparty sectors. For example, data on the loan liability of households are derived from information available from the balance sheets of other institutions, such as commercial banks, NBFCs, insurance companies, general government sector and non-financial corporates (Table A). This procedure is generally used across countries in the absence of adequate coverage and non-availability of requisite data at regular frequencies from household surveys. As pointed out by the OECD "fully capturing financial and non-financial behavior of households *via* surveys is not straight forward, whereas counterparty information is usually well defined and well observed" (OECD, 2017).

Table A: Summary of Data Source for Financial Assets and Liabilities		
Financial Assets		
Instrument	Definition	Assets
Currency	Currency issued by the RBI	Residual item estimated following Rangrajan (2009).
Deposits	Current, saving and time deposits regardless of maturity	Counterpart data from commercial banks, co-operative banks, NBFCs, HFCs, <i>etc.</i>
Debt securities, listed shares, mutual fund units	Debt securities comprise commercial papers, treasury securities, government bonds, publicly issued debentures by financial and non-financial corporates, shares issued by financial and non-financial corporations through public issues	Reports of the Reserve Bank of India and Securities Exchange Board of India. Prospectus and issue related documents.
Life insurance funds	Actuarial reserves and other technical reserves for entitlements relating to individual life insurance policies	Data from insurance companies and public disclosure statements.
Pension / provident funds	Entitlements relating to funded retirement benefits for governments sector and non-government sector employees	Government budget documents, reports of employees' provident funds organisation (EPFO), pension fund regulatory and development authority, and other pension provident fund trusts.
Liabilities		
Loans	Housing loans, consumer loans, crop loans and business loans from financial institutions, <i>viz.</i> , commercial banks, credit societies, NBFCs, HFCs <i>etc.</i>	Counterparty information reported in various annual and quarterly reports of the Reserve Bank and National Housing Bank.
Trade credits	Net trade payables	Reports of the non-financial corporate sector
Note: In addition to the above instruments, Indian households may also own financial assets, namely, financial derivatives, loans and trade credits to trading counterparts, and financial liabilities, like, trade credit from the non-corporate sector. We have not discussed these instruments due to paucity of data.		

Annex II

Table 1: Household Sector's Savings in Financial Assets

(As percentage of quarterly GDP)

Item	2015-16				2016-17				2017-18	
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2
Gross Financial Assets	15.8	7.0	12.6	9.6	16.7	16.0	-11.0	21.8	7.3	13.6
<i>Of which:</i>										
1. Total Deposits (a) + (b)	8.2	3.1	4.4	3.4	8.1	8.6	5.4	3.6	-3.4	5.9
(a) Bank Deposits	7.9	2.8	4.2	3.4	7.8	8.4	5.2	3.6	-3.6	5.8
i. Commercial Bank deposits	7.4	2.7	3.7	3.0	6.9	8.2	4.8	3.3	-3.3	5.7
ii. Cooperative Banks	0.5	0.1	0.5	0.4	0.9	0.2	0.4	0.3	-0.3	0.2
(b) Non-Bank Deposits	0.3	0.3	0.2	0.0	0.3	0.2	0.2	0.0	0.2	0.0
2. Life Insurance Funds	2.3	1.2	2.8	1.6	3.0	2.8	1.4	4.2	2.0	2.4
3. Provident and Pension Funds (including PPF)	2.0	2.0	1.9	1.9	2.3	2.3	2.2	2.1	2.4	2.3
4. Currency	1.3	0.1	1.8	2.5	1.7	-0.1	-21.5	11.1	4.6	1.0
5. Investments, of which	1.5	0.1	1.3	-0.2	1.2	2.1	1.0	0.4	1.2	1.4
i. Mutual Funds	1.2	-0.1	1.1	-0.3	1.1	1.7	0.9	0.3	1.1	1.2
6. Small Savings (excluding PPF)	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.5	0.5

Source: Staff calculations.

Table 2: Household Sector's Liabilities

(As percentage of quarterly GDP)

Item	2015-16				2016-17				2017-18	
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2
Gross Financial Liabilities	1.3	1.9	5.4	2.7	2.7	3.6	-3.7	7.0	1.5	5.3
Loans (Borrowings) from										
A. Financial Corporations (i + ii)	1.3	1.9	5.4	2.7	2.7	3.6	-3.7	7.0	1.5	5.3
(i) Banking Sector	1.5	1.3	3.1	1.9	1.9	2.9	-4.8	6.3	0.5	4.1
<i>Of Which</i>										
Commercial banks	1.3	1.3	3.0	2.0	1.4	2.9	-4.6	6.2	0.5	4.1
(ii) Other Financial Institutions	-0.3	0.6	2.3	0.7	0.9	0.7	1.0	0.6	1.0	1.2
(a) Financial Corporations	-0.5	0.1	1.6	-0.1	0.5	0.1	0.5	0.1	0.2	0.3
(b) Housing Finance Companies	0.2	0.4	0.6	0.8	0.3	0.6	0.6	0.5	0.7	0.8
(c) Insurance Companies	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.0	0.1	0.1
B. Non-Financial Corporations (Private Corporate Business)*	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
C. General Government*	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

*: Negligible.

Source: Staff calculations.

Table 3: Outstanding Position of Assets and Liabilities of Households : Select Indicators

(₹ billion)

Item	2015-16				2016-17				2017-18	
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2
Gross Financial Assets										
Deposits										
<i>Of which:</i>										
a. Bank Deposits (i+ii)	58,292.0	59,339.0	60,903.7	62,245.7	65,535.9	69,121.7	71,610.0	73,536.9	72,120.3	74,509.6
i. Commercial Bank deposits	53,786.4	54,786.6	56,164.2	57,363.1	60,315.1	63,831.6	66,169.2	67,988.2	66,688.1	68,998.9
ii. Cooperative Banks and credit societies	4,505.6	4,552.4	4,739.6	4,882.6	5,220.9	5,290.1	5,440.8	5,548.6	5,432.2	5,510.7
b. Life Insurance Funds	24,797.7	25,042.9	25,830.8	26,262.3	27,355.8	28,403.5	28,973.2	30,725.4	31,520.0	32,517.5
c. Currency	13,594.4	13,623.4	14,247.6	15,173.9	15,788.0	15,736.5	7,465.7	12,009.2	13,800.2	14,221.8
d. Provident Funds	10,645.4	10,978.1	11,310.8	11,643.5	12,039.1	12,434.6	12,830.2	13,225.8	13,624.5	13,624.5
e. Mutual funds	5,479.3	5,544.8	5,953.5	5,757.3	6,061.5	6,936.5	7,227.4	7,702.8	9,462.5	10,181.1
Total (a+b+c+d+e)	112,808.8	114,528.2	118,246.4	121,082.7	126,780.3	132,632.8	128,106.5	137,200.1	140,527.5	145,054.5
As percentage of GDP										
a. Bank Deposits (i+ii)	45.0	44.2	43.8	42.1	45.5	46.5	46.5	45.0	45.9	45.6
i. Commercial Bank deposits	41.5	40.8	40.4	38.8	41.9	43.0	43.0	41.6	42.4	42.2
ii. Cooperative Banks and credit societies	3.5	3.4	3.4	3.3	3.6	3.6	3.5	3.4	3.5	3.4
b. Life Insurance Funds	19.1	18.7	18.6	17.8	19.0	19.1	18.8	18.8	20.1	19.9
c. Currency	10.5	10.2	10.3	10.3	11.0	10.6	4.8	7.3	8.8	8.7
d. Provident Funds	8.2	8.2	8.1	7.9	8.4	8.4	8.3	8.1	8.7	8.3
e. Mutual funds	4.2	4.1	4.3	3.9	4.2	4.7	4.7	4.7	6.0	6.2
Total	87.0	85.4	85.1	82.0	88.1	89.2	83.2	83.9	89.4	88.7
Gross Financial Liabilities										
Loans (Borrowings) from										
A. Financial Corporations (i+ii)	33,424.1	34,615.9	37,023.8	38,554.1	40,162.2	42,140.4	41,350.2	44,836.1	45,382.6	47,522.7
(i) Banking Sector	28,805.0	29,585.0	30,998.8	32,043.1	33,386.2	35,137.1	33,970.4	37,227.9	37,419.1	39,103.9
<i>Of Which</i>										
i. Commercial banks	26,718.9	27,472.0	28,832.3	29,890.3	31,061.9	32,811.2	31,705.5	34,911.9	35,104.6	36,771.1
ii. Cooperative Banks and credit societies	2,075.3	2,102.3	2,155.8	2,142.2	2,313.7	2,315.4	2,254.4	2,305.5	2,304.1	2,322.5
(ii) Other Financial Institutions	4,619.1	5,030.9	6,025.0	6,511.0	6,776.0	7,003.3	7,379.8	7,608.3	7,963.6	8,418.8
<i>Of Which</i>										
i. Financial Corporations	270.5	497.3	1,239.9	1,385.1	1,506.4	1,488.0	1,622.5	1,623.7	1,719.8	1,855.5
ii. Housing Finance Companies	4,348.7	4,533.6	4,785.1	5,125.9	5,269.6	5,515.2	5,757.3	5,984.5	6,243.8	6,563.3
As percentage of GDP										
A. Financial Corporations (i+ii)	25.8	25.8	26.6	26.1	27.9	28.4	26.8	27.4	28.9	29.1
(i) Banking Sector	22.2	22.1	22.3	21.7	23.2	23.6	22.1	22.8	23.8	23.9
<i>Of Which</i>										
i. Commercial banks	20.6	20.5	20.7	20.2	21.6	22.1	20.6	21.3	22.3	22.5
ii. Cooperative Banks and Credit Societies	1.6	1.6	1.6	1.5	1.6	1.6	1.5	1.4	1.5	1.4
(ii) Other Financial Institutions	3.6	3.7	4.3	4.4	4.7	4.7	4.8	4.7	5.1	5.1
<i>Of Which</i>										
i. Financial Corporations	0.2	0.4	0.9	0.9	1.0	1.0	1.1	1.0	1.1	1.1
ii. Housing Finance Companies	3.4	3.4	3.4	3.5	3.7	3.7	3.7	3.7	4.0	4.0

Note: Outstanding data for provident funds of employees of general government sector are not available. Therefore, outstanding figures pertain to EPFO and retirement funds of some public sector undertakings.

Source: Staff calculations.