Basel III - Pillar 3 Disclosures

1. Scope of Application

Top bank in the group

The Basel III Capital Regulation ('Basel III') is applicable to HDFC Bank Limited (hereinafter referred to as the 'Bank') and its two subsidiaries (HDFC Securities Limited and HDB Financial Services Limited) which together constitute the Group in line with the Reserve Bank of India ('RBI') guidelines on the preparation of consolidated prudential reports.

Accounting and regulatory consolidation

For the purpose of financial reporting, the Bank consolidates its subsidiaries in accordance with Accounting Standard ('AS') 21, Consolidated Financial Statements, on a line-by-line basis by adding together like items of assets, liabilities, income and expenditure. Investments in associates are accounted for by the equity method in accordance with AS-23, Accounting for Investments in Associates in Consolidated Financial Statements.

For the purpose of consolidated prudential regulatory reporting, the consolidated Bank includes all group entities under its control, except group companies which are engaged in insurance business and businesses not pertaining to financial services. Details of subsidiaries and associates of the Bank along with the consolidation status for accounting and regulatory purposes are given below:

Name of entity [Country of incorporation]	Included under accounting scope of consolidation	Method of accounting consolidation	Included under regulatory scope of consolidation	Method of regulatory consolidation	Reasons for difference in the method of consolidation	Reasons for consolidation under one of the scope of consolidation
HDFC Securities Limited ('HSL') [India]	Yes	Consolidated in accordance with AS-21, Consolidated Financial Statements.	Yes	Consolidated in accordance with AS-21, Consolidated Financial Statements.	Not applicable	Not applicable
HDB Financial Services Limited ('HDBFS') [India]	Yes	Consolidated in accordance with AS-21, Consolidated Financial Statements.	Yes	Consolidated in accordance with AS-21, Consolidated Financial Statements.	Not applicable	Not applicable
HDB Employee Welfare Trust ('HDBEWT') [India]	Yes	Consolidated in accordance with AS-21, Consolidated Financial Statements.	No	Not applicable	Not applicable	HDBEWT provides relief to employees and/or their dependents such as medical relief, educational relief. The Bank has no investment in this entity.
Atlas Documentary Facilitators Company Private Limited ('ADFC') [India]	Yes	Accounted for by the equity method in accordance with AS-23, Accounting for Investments in Associates in Consolidated Financial Statements.	No	Not applicable	Not applicable	ADFC is a non-financial entity. Bank's investment in ADFC has been risk weighted for capital adequacy purposes.

Name of entity [Country of incorporation]	Included under accounting scope of consolidation	Method of accounting consolidation	Included under regulatory scope of consolidation	Method of regulatory consolidation	Reasons for difference in the method of consolidation	Reasons for consolidation under one of the scope of consolidation
HBL Global Private Limited ('HBL') [India]	Yes	Accounted for by the equity method in accordance with AS-23, Accounting for Investments in Associates in Consolidated Financial Statements.	No	Not applicable	Not applicable	HBL is a non-financial entity. HBL is a subsidiary of ADFC. The Bank has no investment in this entity.
International Asset Reconstruction Company Private Limited ('IARCL') [India]	Yes	Accounted for by the equity method in accordance with AS-23, Accounting for Investments in Associates in Consolidated Financial Statements.	No	Not applicable	Not applicable	Bank's investment has been risk weighted for capital adequacy purposes.

Group entities not considered for consolidation under both accounting scope and regulatory scope

There are no group entities that are not considered for consolidation under both the accounting scope of consolidation and regulatory scope of consolidation.

Group entities considered for regulatory scope of consolidation

Regulatory scope of consolidation refers to consolidation in such a way as to result in the assets of the underlying group entities being included in the calculation of consolidated risk-weighted assets of the group. Following is the list of group entities considered under regulatory scope of consolidation.

(₹ million)

Name of entity [Country of incorporation]	Principal activity of the entity	Total balance sheet equity* as of September 30, 2015 (per accounting balance sheet)	Total balance sheet assets as of September 30, 2015 (per accounting balance sheet)
HDFC Securities Limited ('HSL') [India]	Stock broking	6,353.0	9,774.4
HDB Financial Services Limited ('HDBFS') [India]	Retail assets financing	33,826.5	214,953.1

*comprised of equity share capital and reserves & surplus

Capital deficiency in subsidiaries

There is no capital deficiency in the subsidiaries of the Bank as of September 30, 2015.

Investment in insurance entities

As of September 30, 2015, the Bank does not have investment in any insurance entity.

Restrictions on transfer of funds within the Group

There are no restrictions or impediments on transfer of funds or regulatory capital within the Group as of September 30, 2015.

2. Capital Adequacy

Assessment of capital adequacy

The Bank has a process for assessing its overall capital adequacy in relation to the Bank's risk profile and a strategy for maintaining its capital levels. The process provides an assurance that the Bank has adequate capital to support all risks inherent to its business and an appropriate capital buffer based on its business profile. The Bank identifies, assesses and manages comprehensively all risks that it is exposed to through sound governance and control practices, robust risk management framework and an elaborate process for capital calculation and planning.

The Bank has a comprehensive Internal Capital Adequacy Assessment Process ('ICAAP'). The Bank's ICAAP covers the capital management policy of the Bank, sets the process for assessment of the adequacy of capital to support current and future activities / risks and a report on the capital projections for a period of 2 to 3 years.

The Bank has a structured management framework in the internal capital adequacy assessment process for the identification and evaluation of the significance of all risks that the Bank faces, which may have a material adverse impact on its business and financial position. The Bank considers the following as material risks it is exposed to in the course of its business and therefore, factors these while assessing / planning capital:

- Credit Risk, including residual risks
- Market Risk
- Operational Risk
- Interest Rate Risk in the Banking Book
- Liquidity Risk
- Intraday Risk
- Model Risk
- Credit Concentration Risk
- Business Risk
- Strategic Risk
- Compliance Risk
- Reputation Risk
- Technology Risk
- Counterparty Credit Risk

The Bank has implemented a Board approved Stress Testing Framework which forms an integral part of the Bank's ICAAP. Stress Testing involves the use of various techniques to assess the Bank's potential vulnerability to extreme but plausible stressed business conditions. The changes in the levels of Credit Risk, Market Risk, Liquidity Risk and Interest Rate Risk in the Banking Book ('IRRBB') and the changes in the on and off balance sheet positions of the Bank are assessed under assumed "stress" scenarios and sensitivity factors. Typically, these relate, inter alia, to the impact on the Bank's profitability and capital adequacy. Stress tests are conducted on a quarterly basis and the stress test results are put up to the Risk Policy & Monitoring Committee of the Board on a half yearly basis and to the Board annually, for their review and guidance. The Bank periodically assesses and refines its stress tests in an effort to ensure that the stress scenarios capture material risks as well as reflect possible extreme market moves that could arise as a result of business environment conditions. The stress tests are used in conjunction with the Bank's business plans for the purpose of capital planning in the ICAAP.

Capital requirements for credit risk

(₹ million)

Particulars	**Sep 30, 2015**
Portfolios subject to standardised approach	377,249.0
Securitisation exposures	18,168.3
Total	**395,417.3**

Capital requirements for market risk

(₹ million)

Standardised duration approach	**Sep 30, 2015**
Interest rate risk	20,495.3
Equity risk	2,216.6
Foreign exchange risk (including gold)	1,215.0
Total	**23,926.9**

Capital requirements for operational risk

(₹ million)

Particulars	**Sep 30, 2015**
Basic indicator approach	46,580.4

Common Equity Tier 1 ('CET1'), Tier 1 and Total capital ratios

The minimum capital requirements under Basel III will be phased-in as per the guidelines prescribed by RBI. Accordingly, the Bank is required to maintain a minimum CET1 capital ratio of 5.5%, a minimum Tier I capital ratio of 7.0% and a minimum total capital ratio of 9.0% as of September 30, 2015. The Bank's position in this regard is as follows:

Particulars	**Standalone**	**Consolidated**
	Sep 30, 2015	**Sep 30, 2015**
CET1 capital ratio	12.78%	12.77%
Tier I capital ratio	12.78%	12.77%
Total capital ratio	15.54%	15.53%

Note: Subordinated debt instruments issued by HDBFS have not been considered as eligible capital instruments under the Basel III transitional arrangements.

3. Credit Risk

Credit Risk Management

Credit risk is defined as the possibility of losses associated with diminution in the credit quality of borrowers or counterparties. In a bank's portfolio, losses stem from outright default due to inability or unwillingness of a customer or counterparty to meet commitments in relation to lending, trading, settlement and other financial transactions.

Architecture

The Bank has a comprehensive credit risk management architecture. The Board of Directors of the Bank endorses the credit risk strategy and approves the credit risk policies of the Bank. This is done taking into consideration the Bank's risk appetite, derived from perceived risks in the business, balanced by the targeted profitability level for the risks taken up. The Board oversees the credit risk management functions of the Bank. The Risk Policy & Monitoring Committee ('RPMC'), which is a committee of the Board, guides the development of policies, procedures and systems for managing credit risk, towards implementing the credit risk strategy of the Bank. The RPMC ensures that these are adequate and appropriate to changing business conditions, the structure and needs of the Bank and the risk appetite of the Bank. The RPMC periodically reviews the Bank's portfolio composition and the status of impaired assets.

The Bank's Risk Management Group drives credit risk management centrally in the Bank. It is primarily responsible for implementing the risk strategy approved by the Board, developing procedures and systems for managing risk, carrying out an independent assessment of various risks, approving individual credit exposures and monitoring portfolio composition and quality. Within the Risk Management Group and independent of the credit approval process, there is a framework for review and approval of credit ratings. With regard to the Wholesale Banking business, the Bank's risk management functions are centralised. In respect of the Bank's Retail Assets business, while the various functions relating to policy, portfolio management and analytics are centralised, the underwriting function is distributed across various geographies within the country. The risk management function in the Bank is clearly demarcated and independent from the operations and business units of the Bank. The Risk Management Group is not assigned any business targets.

Credit Process

The Bank expects to achieve its earnings objectives and to satisfy its customers' needs while maintaining a sound portfolio. Credit exposures are managed through target market identification, appropriate credit approval processes, post-disbursement monitoring and remedial management procedures.

There are two different credit management models within which the credit process operates - the Retail Credit Model and the Wholesale Credit Model. The Retail Credit Model is geared towards high volume, small transaction sized businesses wherein credit appraisals of fresh exposures are guided by statistical models and are managed on the basis of aggregate product portfolios. The Wholesale Credit Model on the other hand, is relevant to lower volume, larger transaction size, customised products and relies on a judgmental process for the origination, approval and maintenance of credit exposures.

The credit models have two alternatives for managing the credit process – Product Programs and Credit Transactions. In Product Programs, the Bank approves maximum levels of credit exposure to a set of customers with similar characteristics, profiles and / or product needs, under clearly defined standard terms and conditions.

This is a cost-effective approach to managing credit where credit risks and expected returns lend themselves to a template-based approach or predictable portfolio behavior in terms of yield, delinquency and write-off. Given the high volume environment, automated tracking and reporting mechanisms are important to identify trends in portfolio behavior early and to initiate timely adjustments. In the case of credit transactions, the risk process focuses on individual customers or borrower relationships. The approval process in such cases is based on detailed analysis and the individual judgment of credit officials, often involving complex products or risks, multiple facilities / structures and types of securities.

The Bank's Credit Policies & Procedures Manual and Credit Programs, where applicable, form the core to controlling credit risk in various activities and products. These articulate the credit risk strategy of the Bank and thereby the approach for credit origination, approval and maintenance. These policies define the Bank's overall credit granting criteria, including the general terms and conditions. The policies / programs typically address areas such as target markets / customer segmentation, qualitative and quantitative assessment parameters, portfolio mix, prudential exposure ceilings, concentration limits, price and non-price terms, structure of limits, approval authorities, exception reporting system, prudential accounting and provisioning norms. They take cognizance of prudent and prevalent banking practices, relevant regulatory requirements, nature and complexity of the Bank's activities, market dynamics etc.

Credit concentration risk arises mainly on account of concentration of exposures under various categories including industry, products, geography, underlying collateral nature and single / group borrower exposures. To ensure adequate diversification of risk, concentration ceilings have been set up by the Bank on different risk dimensions, in terms of borrower/ business group, industry and risk grading.

The RPMC sets concentration ceilings and the Risk Management Group monitors exposure level under each dimension and ensures that the portfolio profile meets the approved concentration limits. These concentration ceilings and exposure levels are periodically reported to the Board. The regulatory prudential norms with respect to ceilings on credit exposure to individual borrowers or group of borrowers also ensure that the Bank avoids concentration of exposure.

As an integral part of the credit process, the Bank has a fairly sophisticated credit rating model appropriate to each market segment in Wholesale Credit. The models follow principles similar to those of international rating agencies. In Retail Credit, score cards have been introduced in the smaller ticket, higher volume products like credit cards, two wheeler loans and auto loans. For the other retail products which are typically less granular or have higher ticket sizes, loans are underwritten based on the credit policies, which are in turn governed by the respective Board approved product programs. All retail portfolios are monitored regularly at a highly segmented level.

Management monitors overall portfolio quality and high-risk exposures periodically, including the weighted risk grade of the portfolio and industry diversification. Additional to, and independent of, the internal grading system and the RBI norms on asset classification, the Bank has a labeling system, where individual credits are labeled based on the degree of risk perceived in them by the Bank. Remedial strategies are developed once a loan is identified as an adversely labeled credit.

Definition of Non-Performing Assets

The Bank follows extant guidelines of the RBI on income recognition, asset classification and provisioning. A Non-Performing Asset ('NPA') is a loan or an advance where:

a) Interest and / or installment of principal remain overdue for a period of more than 90 days in respect of a term loan.

b) The account remains 'out of order', in respect of an overdraft / cash credit ('OD' / 'CC'). An account is treated as 'out of order' if the outstanding balance remains continuously in excess of the sanctioned limit / drawing power or where there are no credits continuously for 90 days as on the date of balance sheet or credits are not enough to cover the interest debited during the same period.

c) The bill remains overdue for a period of more than 90 days in the case of bills purchased and discounted.

d) The installment of principal or interest thereon remains overdue for two crop seasons for short duration crops.

e) The installment of principal or interest thereon remains overdue for one crop season for long duration crops.

f) Any amount to be received remains overdue for a period of more than 90 days in respect of other accounts.

g) The amount of liquidity facility remains outstanding for more than 90 days, in respect of a securitisation transaction undertaken in terms of RBI's guidelines on securitisation dated February 1, 2006.

h) In respect of derivative transactions, the overdue receivables representing positive mark-to-market value of a derivative contract, if these remain unpaid for a period of 90 days from the specified due date for payment.

Any amount due to the Bank under any credit facility is 'overdue' if it is not paid on the due date fixed by the Bank. The Bank will classify an account as NPA if the interest due and charged during any quarter is not serviced fully within 90 days from the end of the quarter. When a particular facility of a borrower has become non-performing, the facilities granted by the Bank to that borrower (whether a wholesale or retail borrower) will be classified as NPA and not the particular facility alone which triggered the NPA classification for that borrower.

Advances against term deposits, National Savings Certificates eligible for surrender, Indira Vikas Patras, Kisan Vikas Patras and Life Insurance policies need not be treated as NPAs, provided adequate margin is available in the accounts. Credit facilities backed by the Central Government though overdue may be treated as NPA only when the Government repudiates its guarantee when invoked. State Government guaranteed advances and investments in State Government guaranteed securities would attract asset classification and provisioning norms if interest and / or principal or any other amount due to the Bank remains overdue for more than 90 days.

A loan for an infrastructure project will be classified as NPA during any time before commencement of commercial operations as per record of recovery (90 days overdue), unless it is restructured and becomes eligible for classification as 'standard asset' in terms of conditions laid down in the related RBI guidelines. A loan for an infrastructure project will be classified as NPA if it fails to commence commercial operations within two years from the original Date of Commencement of Commercial Operations ('DCCO')**,** even if it is regular as per record of recovery, unless it is restructured and becomes eligible for classification as 'standard asset' in terms of conditions laid down in the related RBI guidelines.

A loan for a non-infrastructure project (other than commercial real estate exposures) will be classified as NPA during any time before commencement of commercial operations as per record of recovery (90 days overdue), unless it is restructured and becomes eligible for classification as 'standard asset' in terms of conditions laid down in the related RBI guidelines. A loan for a non-infrastructure project (other than commercial real estate exposures) will be classified as NPA if it fails to commence commercial operations within one year from the original DCCO, even if is regular as per record of recovery, unless it is restructured and becomes eligible for classification as 'standard asset' in terms of conditions laid down in the related RBI guidelines.

A loan for commercial real estate project will be classified as NPA during any time before commencement of commercial operations as per record of recovery (90 days overdue), or if the project fails to commence commercial operations within one year from the original DCCO or if the loan is restructured.

Non-performing assets are classified into the following three categories:

- **Substandard Assets**
  A substandard asset is one, which has remained NPA for a period less than or equal to 12 months. In such cases, the current net worth of the borrower / guarantor or the current market value of the security charged is not enough to ensure recovery of the dues to the banks in full. In other words, such an asset will have well defined credit weaknesses that jeopardize the liquidation of the debt and are characterised by the distinct possibility that banks will sustain some loss, if deficiencies are not corrected.

- **Doubtful Assets**
  A doubtful asset is one, which remained NPA for a period exceeding 12 months. A loan classified as doubtful has all the weaknesses inherent in assets that were classified as substandard, with the added characteristic that the weaknesses make collection or liquidation in full, on the basis of currently known facts, conditions and values, highly questionable and improbable.

- **Loss Assets**
  A loss asset is one where loss has been identified by the Bank or internal or external auditors or the RBI inspection but the amount has not been written off wholly. In other words, such an asset is considered uncollectible and of such little value that its continuance as a bankable asset is not warranted although there may be some salvage or recovery value.

Interest on non-performing assets is not recognised in the profit / loss account until received. Specific provision for non-performing assets is made based on Management's assessment of their degree of impairment subject to the minimum provisioning level prescribed by RBI.

Geographic distribution of gross credit risk exposures

(₹ million)

Exposure distribution	**September 30, 2015**		
	Fund Based	**Non-fund Based**	**Total**
Domestic	4,676,061.6	700,997.3	5,377,058.9
Overseas	333,516.3	37,883.3	371,399.6
Total	**5,009,577.9**	**738,880.6**	**5,748,458.5**

Note: Exposure is comprised of loans & advances lendings, margins, investments in debenture & bonds, commercial papers, equity shares, preference shares, units of mutual funds, certificate of deposits, security receipts, on-balance sheet securitisation exposures purchased or retained, deposits with NABARD, SIDBI & NHB under the priority/weaker section lending schemes, guarantees, acceptances & endorsements, letters of credit and credit equivalent of foreign exchange and derivative exposures.

Industry-wise distribution of exposures

(₹ million)

Industry	As on September 30, 2015	
	Fund Based	Non-fund Based
Agriculture and Allied Activities	431,606.8	3,267.8
Automobile & Auto Ancillary	227,910.8	21,700.5
Banks and Financial Institutions	271,448.3	68,959.1
Capital Market Intermediaries	21,436.8	24,441.6
Cement & Products	41,848.1	7,419.9
Chemical and Products	53,871.4	6,043.8
Coal & Petroleum Products	37,758.1	115,149.7
Construction and Developers (Infrastructure)	88,420.1	31,478.0
Consumer Durables	29,525.9	5,123.7
Consumer Loans	559,146.1	24.1
Drugs and Pharmaceuticals	40,367.4	5,130.1
Engineering	103,351.9	58,335.9
Fertilisers & Pesticides	73,036.3	13,605.2
Food and Beverage	129,251.4	9,292.5
Gems and Jewellery	61,564.0	4,305.7
Housing Finance Companies	97,096.6	416.7
Information Technology	19,349.3	14,083.2
Iron and Steel	111,136.2	18,424.1
Media & Entertainment	15,397.8	1,573.9
Mining and Minerals	52,641.7	3,043.7
NBFC / Financial Intermediaries	190,666.8	6,254.0
Non-ferrous Metals	25,091.4	55,513.8
Paper, Printing and Stationery	30,363.5	2,214.1
Plastic & Products	25,983.6	3,445.4
Power	110,907.3	18,086.0
Real Estate & Property Services*	109,036.2	12,605.5
Retail Trade	221,396.8	7,014.7
Road Transportation**	164,071.7	2,788.1
Services	259,386.5	17,261.3
Telecom	73,343.1	23,028.3
Textiles & Garments	85,909.3	12,940.0
Wholesale Trade	352,301.0	40,566.5
Other Retail Assets***	763,391.5	99,077.6
Other Industries****	131,564.2	26,266.1
Total	**5,009,577.9**	**738,880.6**

* *Details of exposure to real estate sector' as disclosed in the Notes forming part of the Financial Statements is as per RBI guidelines, which includes exposure to borrowers in the real estate industry, investment in home finance institutions, securitisation, etc.*

** *Includes retail commercial vehicle financing.*

*** *Comprises retail assets not elsewhere classified*

**** *Covers industries such as airlines, fishing, FMCG & personal care, glass & products, leather & products, other non-metallic mineral products, railways, rubber & products, shipping, tobacco & products, wood & products, each of which is less than 0.25% of the total exposure.*

Exposures to industries (other than retail assets not elsewhere classified) in excess of 5% of total exposure

(₹ million)

Industry	As on September 30, 2015	
	Fund Based	Fund Based
Agriculture and Allied Activities	431,606.8	3,267.8
Banks and Financial Institutions	271,448.3	68,959.1
Consumer Loans	559,146.1	24.1
Wholesale Trade	352,301.0	40,566.5

Residual contractual maturity breakdown of assets

- **As on September 30, 2015**

(₹ million)

Maturity Buckets	Cash and Balances with RBI	Balances with Banks and Money at Call and Short Notice	Investment	Advances	Fixed Assets	Other Assets	Grand Total
1 to 14 days	66,440.8	58,607.0	369,270.0	247,231.7	-	5,748.4	747,297.9
15 to 28 days	6,091.9	105.2	79,890.0	115,531.3	-	37,634.1	239,252.5
29 days to 3 months	18,419.7	2,302.8	240,342.3	434,747.1	-	25,859.5	721,671.4
3 to 6 months	12,416.9	8,559.6	164,556.0	384,287.8	-	28,404.4	598,224.7
6 months to 1 year	27,609.2	4,033.1	171,139.2	435,555.7	-	13,125.7	651,462.9
1 to 3 years	82,575.1	5,935.5	421,973.0	2,012,569.3	-	148,666.3	2,671,719.2
3 to 5 years	4,839.1	-	35,659.6	376,516.9	-	47,328.3	464,343.9
Above 5 years	38,804.2	139.9	208,021.5	376,246.6	33,230.7	33,379.6	689,822.5
Total	**257,196.9**	**79,683.1**	**1,690,851.6**	**4,382,686.4**	**33,230.7**	**340,146.3**	**6,783,795.0**

Basel III - Pillar 3 Disclosures

Asset quality

- **NPA ratios**

(₹ million)

Particulars	Sep 30, 2015
Gross NPAs to gross advances	0.92%
Net NPAs to net advances	0.27%

- **Amount of Net NPAs**

(₹ million)

Particulars	Sep 30, 2015
Gross NPAs	40,651.5
Less: Provisions	28,858.1
Net NPAs	11,793.4

- **Classification of Gross NPAs**

(₹ million)

Particulars	Sep 30, 2015
Sub-standard	21,584.1
Doubtful*	
▪ Doubtful 1	7,184.0
▪ Doubtful 2	3,063.7
▪ Doubtful 3	3,491.6
Loss	5,328.1
Total Gross NPAs	**40,651.5**

* *Doubtful 1, 2 and 3 categories correspond to the period for which asset has been doubtful viz., up to one year ('Doubtful 1'), one to three years ('Doubtful 2') and more than three years ('Doubtful 3').*

Note: NPAs include all assets that are classified as non-performing.

- **Movement of Gross NPAs**

(₹ million)

Particulars	Sep 30, 2015
Opening balance	36,019.3
Additions during the year	27,018.2
Reductions	(22,386.0)
Closing balance	**40,651.5**

- **Movement of provisions for NPAs**

(₹ million)

Particulars	**Sep 30, 2015**
Opening balance	26,134.4
Provisions made during the year	18,148.8
Write-off	(9,737.4)
Any other adjustment, including transfer between provisions	-
Write-back of excess provisions	(5,687.7)
Closing balance	**28,858.1**

- Recoveries from written-off accounts aggregating ₹ 4,116.7 million and write-offs aggregating ₹ 9,737.4 million have been recognised in the statement of profit and loss.

- **Non-performing investments**

(₹ million)

Particulars	**Sep 30, 2015**
Gross non-performing investments	1,227.3
Less: Provisions	1,189.2
Net non-performing investments	**38.1**

- **Provision for depreciation on investments**

(₹ million)

Particulars	**Sep 30, 2015**
Opening balance	1,155.0
Provisions made during the year	213.2
Write-off	-
Any other adjustment, including transfer between provisions	-
Write-back of excess provisions	(103.5)
Closing balance	**1,264.7**

Movement in provisions held towards depreciation on investments have been reckoned on a yearly basis

- **Provision for standard assets**

(₹ million)

Particulars	**Sep 30, 2015**
Opening balance	16,058.6
Provisions made/reversed during the year	2,332.1
Any other adjustment, including transfer between provisions*	23.0
Closing balance	**18,413.7**

**Refers to foreign currency translation adjustment relating to provision for standard assets in the Bank's overseas branches.*

- **Geographic distribution**

(₹ million)

Particulars	**As on Sep 30, 2015**		
	Domestic	**Overseas**	**Total**
Gross NPA	39,025.5	1,626.0	40,651.5
Provisions for NPA	27,847.0	1,011.1	28,858.1
Provision for standard assets	17,947.0	466.7	18,413.7

- **Industry-wise distribution**

(₹ million)

Industry	As on Sep 30, 2015			For half year ended Sep 30, 2015	
	Gross NPA	Provisions for NPA	Provision for standard assets	Write offs	Provisions for NPA
Agriculture and Allied Activities	6,757.5	4,111.9	1,254.5	1,062.1	1,636.4
Automobile & Auto Ancillary	1,649.9	1,526.7	906.9	49.9	277.2
Banks and Financial Institutions	12.6	6.3	387.9	1.2	7.4
Capital Market Intermediaries	37.8	37.4	81.5	0.0	0.6
Cement & Products	41.7	32.2	169.5	16.1	34.0
Chemical and Products	320.2	299.4	216.9	8.9	3.1
Coal & Petroleum Products	84.5	60.0	206.1	5.3	14.7
Construction and Developers (Infrastructure)	1,615.1	1,177.4	310.3	101.8	570.2
Consumer Durables	82.8	39.1	107.6	32.0	35.3
Consumer Loans	2,645.1	1,300.9	2,269.4	1,828.5	1,943.6
Drugs and Pharmaceuticals	179.5	153.2	182.1	36.3	18.1
Engineering	1,575.2	1,473.7	388.4	54.0	54.0
Fertilisers & Pesticides	4.5	2.7	291.6	0.8	2.7
Food and Beverage	1,476.1	988.8	497.2	18.8	387.4
Gems and Jewellery	417.0	331.1	189.8	4.4	42.0
Housing Finance Companies	0.0	0.0	266.9	0.0	0.0
Information Technology	420.6	327.9	80.6	440.4	83.4
Iron and Steel	2,533.3	1,766.5	381.8	34.0	179.1
Media & Entertainment	102.7	59.0	43.0	10.0	31.1
Mining and Minerals	250.7	181.3	207.2	1,039.5	2.3
NBFC / Financial Intermediaries	1,729.8	1,726.5	433.6	2.0	197.2
Non-ferrous Metals	44.0	28.5	85.5	0.3	8.7
Paper, Printing and Stationery	831.8	806.8	136.6	11.6	60.6
Plastic & Products	325.7	190.2	83.2	9.0	182.6
Power	194.7	133.5	416.8	0.0	33.3
Real Estate & Property Services	1,086.9	759.6	749.3	102.7	252.0
Retail Trade	2,150.9	1,383.1	771.8	455.0	702.0
Road Transportation	1,781.4	1,187.6	554.0	437.8	449.8
Services	1,802.4	1,210.9	1,106.8	601.7	691.6
Telecom	35.0	19.7	280.0	1.6	8.9
Textiles & Garments	884.2	731.2	279.2	50.9	87.1
Wholesale Trade	4,283.5	3,379.0	1,364.5	50.5	621.2
Other Retail Assets	3,400.4	1,892.7	3,093.1	2,666.9	2,397.4
Other Industries	1,894.0	1,533.3	620.1	603.4	608.7
Total	**40,651.5**	**28,858.1**	**18,413.7**	**9,737.4**	**11,623.7**

4. Credit Risk: Portfolios subject to the Standardised Approach

Standardised approach

The Bank has used the Standardised Approach under the RBI's Basel III capital regulations for its credit portfolio.

For exposure amounts after risk mitigation subject to the standardised approach (including exposures under bills re-discounting transactions, if any), the Bank's outstanding (rated and unrated) in three major risk buckets as well as those that are deducted, are as follows:

(₹ million)

Particulars	Sep 30, 2015
Below 100% risk weight	2,413,408.3
100% risk weight	1,892,656.3
More than 100% risk weight	1,442,375.5
Deducted	18.4
Total	**5,748,458.5**

Note: Exposure includes loans & advances, lendings, margins, investments in debenture & bonds, commercial papers, equity shares, preference shares, units of mutual funds, certificate of deposits, security receipts, on-balance sheet securitisation exposures purchased or retained, deposits with NABARD, SIDBI & NHB under the priority/weaker section lending schemes, guarantees, acceptances & endorsements, letters of credit and credit equivalent of foreign exchange and derivative exposures.

Treatment of undrawn exposures

As required by the regulatory norms, the Bank holds capital even for the undrawn portion of credit facilities which are not unconditionally cancellable without prior notice by the Bank, by converting such exposures into a credit exposure equivalent based on the applicable Credit Conversion Factor ('CCF'). For credit facilities which are unconditionally cancellable without prior notice, the Bank applies a CCF of zero percent on the undrawn exposure.

Credit rating agencies

The Bank is using the ratings assigned by the following domestic external credit rating agencies, approved by the RBI, for risk weighting claims on domestic entities:

- Credit Analysis and Research Limited ('CARE')
- Credit Rating Information Services of India Limited ('CRISIL')
- ICRA Limited ('ICRA')
- India Ratings and Research Private Limited (earlier known as Fitch India)
- Brickwork Ratings India Private Limited ('Brickwork')
- SMERA Ratings Limited ('SMERA')

The Bank is using the ratings assigned by the following international credit rating agencies, approved by the RBI, for risk weighting claims on overseas entities:

- Fitch Ratings
- Moody's
- Standard & Poor's

Types of exposures for which each agency is used

The Bank has used the solicited ratings assigned by the above approved credit rating agencies for all eligible exposures, both on balance sheet and off balance sheet, whether short term or long term, in the manner permitted in the RBI guidelines on Basel III capital regulations. The Bank has not made any discrimination among ratings assigned by these agencies nor has restricted their usage to any particular type of exposure.

Public issue ratings transferred onto comparable assets

The Bank has, in accordance with RBI guidelines on Basel III capital regulations, transferred public ratings on to comparable assets in the banking books in the following manner:

Issue Specific Ratings

- All long term and short term ratings assigned by the credit rating agencies specifically to the Bank's long term and short term exposures respectively are considered by the Bank as issue specific ratings.

- For assets in the Bank's portfolio that have contractual maturity less than or equal to one year, short term ratings accorded by the chosen credit rating agencies are considered relevant. For other assets, which have a contractual maturity of more than one year, long term ratings accorded by the chosen credit rating agencies are considered relevant.

- Long term ratings issued by the chosen domestic credit rating agencies have been mapped to the appropriate risk weights applicable as per the standardised approach. The rating to risk weight mapping furnished below was adopted for domestic corporate exposures, as per RBI guidelines:

Long Term Rating	AAA	AA	A	BBB	BB & Below	Unrated
Risk Weight	20%	30%	50%	100%	150%	100%

- In respect of issue specific short term ratings the following risk weight mapping has been adopted by the Bank, as provided in the RBI guidelines:

Short Term Rating equivalent	A1+	A1	A2	A3	A4 & D	Unrated
Risk Weight	20%	30%	50%	100%	150%	100%

- Where multiple issue specific ratings are assigned to the Bank's exposure by the various credit rating agencies, the risk weight is determined as follows :

(i) If there is only one rating by a chosen credit rating agency for a particular claim, then that rating is used to determine the risk weight of the claim.

(ii) If there are two ratings accorded by chosen credit rating agencies, which map into different risk weights, the higher risk weight is applied.

(iii) If there are three or more ratings accorded by chosen credit rating agencies with different risk weights, the ratings corresponding to the two lowest risk weights are referred to and the higher of those two risk weights is applied, i.e., the second lowest risk weight.

Inferred Ratings

- The specific rating assigned by a credit rating agency to a debt or issuance of a borrower or a counterparty (to which the Bank may or may not have an exposure), which the Bank applies to an un-assessed claim of the Bank on such borrower or counterparty is considered by the Bank as inferred ratings.

- In terms of guidelines on Basel III capital regulations, the Bank uses a long term rating as an inferred rating for an un-assessed long term claim on the borrower, where the following conditions are met:

  (i) The Bank's claim ranks pari passu or senior to the specific rated debt in all respects.

  (ii) The maturity of the Bank's claim is not later than the maturity of the rated claim.

- The un-assessed long term claim is assigned the risk weight corresponding to an inferred long term rating as given in the table under Issue Specific Ratings.

- For an un-assessed short term claim, the Bank uses a long term or short term rating as an inferred rating, where the Bank's claim ranks pari passu to the specified rated debt.

- Where a long term rating is used as an inferred rating for a short term un-assessed claim, the risk weight corresponding to an inferred long term rating as given in the table under Issue Specific Rating is considered by the Bank.

- Where a short term rating is used as an inferred rating for a short term un-assessed claim, the risk weight corresponding to an inferred short term rating as given in the table under Issue Specific Rating is considered, however with notch up of the risk weight. Notwithstanding the restriction on using an issue specific short term rating for other short term exposures, an unrated short term claim on a counterparty is given a risk weight of at least one level higher than the risk weight applicable to the rated short term claim on that counterparty. If a short term rated facility to a counterparty attracts a 20% or a 50% risk weight, the unrated short term claims to the same counterparty will get a risk weight not lower than 30% or 100% respectively.

- If long term ratings corresponding to different risk weights are applicable for a long term exposure, the highest of the risk weight is considered by the Bank. Similarly, if short term ratings corresponding to different risk weights are applicable for a short term exposure, the highest of the risk weight is considered. However, where both long term and short term corresponding to different risk weights are applicable to a short term exposure, the highest of the risk weight is considered by the Bank for determination of capital charge.

- If a counterparty has a long term exposure with an external long term rating that warrants a risk weight of 150%, all unrated claims on the same counterparty, whether short term or long term, receives a 150% risk weight, unless recognised credit risk mitigation techniques have been used for such claims. Similarly, if the counterparty has a short term exposure with an external short term rating that warrants a risk weight of 150%, all unrated claims on the same counterparty, whether long term or short term, receive a 150% risk weight.

Issuer Ratings

- Ratings assigned by the credit rating agencies to an entity conveying an opinion on the general creditworthiness of the rated entity are considered as issuer ratings.

- Where multiple issuer ratings are assigned to an entity by various credit rating agencies, the risk weight for the Bank's claims are as follows:

  (i) If there is only one rating by a chosen credit rating agency for a particular claim, then that rating is used to determine the risk weight of the claim.

  (ii) If there are two ratings accorded by chosen credit rating agencies, which map into different risk weights, the higher risk weight is applied.

  (iii) If there are three or more ratings accorded by chosen credit rating agencies with different risk weights, the ratings corresponding to the two lowest risk weights are referred to and the higher of those two risk weights is applied, i.e., the second lowest risk weight.

- The risk weight assigned to claims on counterparty based on issuer ratings are as those mentioned under Issue Specific Ratings.

5. Credit Risk Mitigation: Disclosures for Standardised Approach

Policies and process

The Bank's Credit Policies & Procedures Manual and Product Programs include the risk mitigation and collateral management policy of the Bank. The policy covers aspects such as the nature of risk mitigants/collaterals acceptable to the Bank, the documentation and custodial arrangement of the collateral, the valuation approach and periodicity etc.

For purposes of computation of capital requirement for Credit Risk, the Bank recognises only those collaterals that are considered as eligible for risk mitigation in the RBI Basel III guidelines on standardised approach, which are as follows:

- Cash deposit with the Bank
- Gold, including bullion and jewelry
- Securities issued by Central and State Governments
- Kisan Vikas Patra and National Savings Certificates (Kisan Vikas Patra is a safe and long term investment option backed by the Government of India and provides interest income similar to bonds; National Savings Certificates are certificates issued by the Department of Post, Government of India – it is a long term safe savings option for the investor and combines growth in money with reductions in tax liability as per the provisions of the Indian Income Tax Act, 1961)
- Life insurance policies with a declared surrender value of an insurance company which is regulated by the insurance sector regulator
- Debt securities rated at least BBB (-)/PR3/P3/F3/A3
- Units of Mutual Funds, where the investment is in instruments mentioned above

The Bank uses the comprehensive approach in capital assessment. In the comprehensive approach, when taking collateral, the Bank calculates the adjusted exposure to a counterparty for capital adequacy purposes by netting off the effects of that collateral. The Bank adjusts the value of any collateral by a haircut to take into account possible future fluctuations in the value of the security occasioned by market movements.

For purposes of capital calculation, the Bank recognises the credit protection given by the following entities, considered eligible as per RBI guidelines:

- Sovereigns, sovereign entities (including Bank for International Settlements ('BIS'), the International Monetary Fund ('IMF'), European Central Bank and European Community as well as Multi-lateral Development Banks like World Bank Group, IBRD, IFC, Asian Development Bank, African Development Bank, European Bank for Reconstruction & Development, Inter-American Development Bank, European Investment Bank, European Investment Fund, Nordic Investment Bank, Caribbean Development Bank, Islamic Development Bank & Council of Europe Development Bank, Export Credit Guarantee Corporation and Credit Guarantee Fund Trust for Small Industries ('CGTSI'), Credit Guarantee Fund Trust for Low Income Housing ('CRGFTLIH')), banks and primary dealers with a lower risk weight than the counterparty;.
- Other entities that are externally rated. This would include credit protection provided by parent, subsidiary and affiliate companies when they have a lower risk weight than the obligor.

The credit risk mitigation taken is largely in the form of cash deposit with the Bank and thus the risk (credit and market) concentration of the mitigants is low.

Exposure covered by financial collateral post haircuts

Total exposure that is covered by eligible financial collateral after the application of haircuts is given below:

(₹ million)

Particulars	**Sep 30, 2015**
Total exposure covered by eligible financial collateral	462,371.0

Exposure covered by guarantees / credit derivatives

The total exposure for each separately disclosed credit risk portfolio that is covered by guarantees/ credit derivatives is given below:

(₹ million)

Particulars	**Sep 30, 2015**
Total exposure covered by guarantees	20,371.6

6. Securitisation Exposures

Objectives, Policies, Monitoring

The Bank undertakes securitisation / loan assignment transactions with the objective of maximizing return on capital employed, managing liquidity, meeting priority sector lending requirements and maximizing yield on asset opportunities.

The RBI issued 'Revised Securitisation Guidelines' on May 7, 2012 (hereinafter, the 'revised securitisation guidelines') covering both Securitisation and Loan Assignment transactions separately. The said guidelines define minimum holding period, minimum retention requirements, due diligence, credit monitoring, stress testing requirements etc. For loan assignment transactions, credit enhancement has been disallowed under the revised guidelines.

The Bank undertakes both 'purchase' and 'sale', transactions through both securitisation and loan assignment routes and has Board approved policies for both.

The Bank participates in Securitisation and Loan Assignment transactions in the following roles:

- **Originator / Seller**
  The Bank originates assets in its book and subsequently down-sells them through the securitisation or assignment route.

- **Servicing and Collection agent**
  For sold assets, the Bank undertakes the activity of collections and other servicing activities including preparation of monthly payout reports.

- **Investor**
  The Bank invests in Pass Through Certificates ('PTCs') backed by financial assets originated by third parties for the purposes of holding/trading/maximizing yield opportunities and meeting priority sector lending requirements.

- **Assignee**
  The Bank purchases loans through the direct assignment route for purposes of book building and yield optimisation.

- **Liquidity facility provider**
  In case of sale transactions undertaken through the securitisation route, the Bank may also provide liquidity facility. This is a type of credit support used to meet temporary collection mismatches on account of timing differences between the receipt of cash flows from the underlying performing assets and the fulfillment of obligations to the beneficiaries. The Bank may also undertake to be a third party liquidity facility provider for other securitisation transactions.

- **Credit enhancement provider**

  Under the revised securitisation guidelines, the Bank may provide credit enhancement on Securitisation 'sale' transactions undertaken by the Bank / a third party for meeting shortfalls arising on account of delinquencies and prepayment losses in the underlying pool sold. The Bank may also undertake to be a credit enhancement provider for securitisation transactions originated by third parties.

- **Underwriter**

  The Bank may underwrite in whole or part of an issuance of securitised debt instruments, with the intent of selling them at a later stage subject to stipulations under the extant RBI guidelines.

The major risks inherent in Securitisation/Loan Assignment transactions are given below:

- **Credit Risk**

  In case of Securitisation transactions, where credit enhancement is provided by the originator or any third party as permitted under the revised guidelines, the investor bears the loss in case the shortfalls in collections exceed the credit enhancement provided Where credit enhancement is provided in the form of a corporate guarantee, the investor bears the loss that could arise from default by the guarantor which is also reflected in a downgrade in the rating of the corporate guarantor. In case of Loan Assignment transactions, the assignee bears the loss arising from defaults/delinquencies by the underlying obligors.

- **Market Risk:**
  - ✓ **Liquidity Risk**

    This is the risk arising on account of absence of a secondary market, which provides exit options to the investor/participant. This risk would be applicable only in case of securitisation transactions.

  - ✓ **Interest Rate Risk**

    This is the mark-to-market risk arising on account of interest rate fluctuations.

- **Prepayment Risk**

  Prepayments in the securitised /assigned pool result in early amortisation and loss of future interest (re-investment risk) to the investor on the amounts.

- **Co-mingling Risk**

  This is the risk arising from co-mingling of funds belong to the investor(s) with those of the originator and/or servicer. This risk occurs when there is a time lag between collection of amounts due from the obligors and payouts made to the investors/assignee.

- **Servicer Risk**

  Servicer risk is the risk arising on account of the inability of a collection and processing agent to collect monies from the underlying obligors and operational difficulties in processing the payments. In long tenor pools, the investor is exposed to the risk of servicer defaulting or discontinuing its operations in totality.

- **Regulatory and Legal Risk**

  These are risks arising on account of non-compliance of transaction structures with the extant regulatory guidelines which may result in higher risk weight and hence higher capital charge being applied on the transaction or the Bank not being able to classify the transactions as priority sector lending. These risks also arise when transactions are not compliant with applicable laws which may result in the transaction being rendered invalid. Conflict between the provisions of the transaction documents and those of the underlying financial facility agreement or non-enforceability of security/claims due to imperfection in execution of the underlying facility agreements with the borrowers could also lead to an increase in legal risk. Risk could also arise due to issues on interpretation of tax laws leading to changes in scheduled transaction cash flows.

The overall framework for both securitisation and loan assignment transactions is specified in the respective Board approved policies. The said policies define the covenants for evaluation and the key requirements that need to be adhered to for all such transactions such as the Minimum Holding Period ('MHP') and Minimum Retention Requirement ('MRR') stipulations, credit enhancement (for securitisation transactions), structure, rating and accounting treatment. Additionally, for purchase transactions, the Bank examines parameters such as the profile and track record of the originator, the type and nature of underlying assets, pool characteristics, rating & credit enhancement provided (if applicable).

The Bank also has a process for monitoring the performance of all pools purchased under securitisation or the loan assignment route (both prior to as well as post the issuance of the revised securitisation guidelines) basis information received from the servicing agent / trustee. The performance of pools is measured by analysing parameters such as collection ratios, delinquencies, credit enhancement utilisation and level of available credit enhancement (where applicable). The Bank undertakes regular escalation to the Management on performance of pools which show concerning trends. In case of sold pools, a memorandum on transactions undertaken is put up to the Audit & Compliance Committee of the Board on a quarterly basis.

Accounting Policy for securitisation transactions

The Bank securitises out its receivables, subject to the MHP criteria and the MRR of RBI, to Special Purpose Vehicles ('SPVs') in securitisation transactions. Such securitised-out receivables are de-recognised in the balance sheet when they are sold (true sale criteria being fully met with) and consideration is received by the Bank. Sales / transfers that do not meet these criteria for surrender of control are accounted for as secured borrowings. In respect of receivable pools securitised-out, the Bank provides liquidity and credit enhancements, as specified by the rating agencies, in the form of cash collaterals / guarantees and / or by subordination of cash flows, not exceeding 20% of the total securitised instruments, in line with RBI guidelines. The Bank also acts as a servicing agent for receivable pools securitised-out.

The Bank also enters into transactions for transfer of standard assets through the direct assignment of cash flows, which are similar to asset-backed securitisation transactions through the SPV route, except that such portfolios of receivables are assigned directly to the purchaser and are not represented by Pass through Certificates ('PTCs'), subject to the RBI prescribed MHP criteria and the MRR. The RBI issued addendum guidelines on securitisation of standard assets vide its circular dated May 7, 2012. Accordingly, the Bank does not provide liquidity or credit enhancements on the direct assignment transactions undertaken subsequent to these guidelines.

Pursuant to these guidelines, the Bank amortises any profit received in cash for every individual securitisation or direct assignment transaction at the end of every financial year. This amortisation is calculated as the maximum of either of the three parameters stated below:

- the losses incurred on the portfolio, including marked-to-market losses in case of securitisation transactions, specific provisions, if any, and direct write-offs made on the MRR and any other exposures to the securitisation transaction (other than credit enhancing interest only strip); or

- the amount of unamortised cash profit at the beginning of the year multiplied by the amount of principal amortised during the year as a proportion to the amount of unamortised principal at the beginning of the year; or

- the amount of unamortised cash profit at the beginning of the year divided by residual maturity of the securitisation or the direct assignment transaction.

In relation to securitisation transactions undertaken prior to the aforementioned RBI guidelines, including those undertaken through the direct assignment route, the Bank continues to amortise the profit / premium that arose on account of sale of receivables over the life of the securities sold, in accordance with the RBI guidelines on securitisation of standard assets issued vide its circular dated February 1, 2006.

Any loss arising on account of sale of receivables is recognised in the Statement of Profit and Loss for the period in which the sale occurs in accordance with the said RBI guidelines.

The Bank invests in PTCs issued by other SPVs. These are accounted for at the deal value and are classified as investments. The Bank also buys loans through the direct assignment route which are classified as advances. These are carried at acquisition cost unless it is more than the face value, in which case the premium is amortised based on effective interest rate (EIR) method.

External credit rating agencies

In the banking book, following were the external credit rating agencies involved with the Bank's Securitisation and Loan Assignment transactions:

- Credit Analysis and Research Limited ('CARE')
- Credit Rating Information Services of India Limited ('CRISIL')
- India Ratings and Research Private Limited ('India Ratings')
- ICRA Limited ('ICRA')
- Brickwork Ratings India Private Limited ('Brickwork')

The ratings declared / issued by the above agencies were used to cover the following securitisation and loan assignment exposures:

- Securitised Debt Instruments / PTCs / Purchased assets
- Second loss credit enhancement facilities
- Liquidity facilities

Securitisation exposures in banking book

- Details of securitisation exposures in banking book

(₹ million)

Particulars	**Sep 30, 2015**
Amount securitised-out outstanding	1,488.0
Amount securitised-out during the period	-
Losses recognised during the current period for loans exposures securitised earlier	-
Amount of assets intended to be securitised within a year*	-
Of which amount of assets originated within a year before securitisation	

**The Bank has made no projection of the assets it intends to securitise-out during the fiscal year beginning April 1, 2015. Securitisation transactions are undertaken on a need basis to meet the objectives articulated under 'Objectives, Policy, Monitoring'.*

- The total amount of exposures securitised and unrecognised gain or losses on sale

(₹ million)

Exposure type	**Sep 30, 2015**	
	Outstanding amount of exposures securitised	**Outstanding unrecognised gain or loss on sale**
Loans against property and rent receivables	238.0	-
Housing loans	1,250.0	-
Total	**1,488.0**	**-**

- Aggregate amount of on-balance sheet securitisation exposures retained or purchased

(₹ million)

Exposure Type	**Sep 30, 2015**
Commercial vehicle loans	5.0
Housing loans	283,264.4
Mixed assets*	81.0
Tractor loans	38.1
Total	**283,388.5**

**includes two wheeler loans and auto loans*

- Aggregate amount of off-balance sheet securitisation exposures

(₹ million)

Exposure type	Sep 30, 2015
Housing loans	1,687.1
Mixed assets*	1,842.6
Total	**3,529.7**

* *includes auto loans, commercial vehicle loans, two wheeler loans, loans against property and loans against rent receivables.*

- Aggregate amount of securitisation exposures retained or purchased and the associated capital charges, broken down between exposures and further broken down into different risk weight bands for each regulatory capital approach:

(₹ million)

Risk weight bands	Exposure type	Sep 30, 2015	
		Exposure	Capital Charge
Less than 100%	Housing loans	282,657.3	12,886.1
	Mixed assets*	81.0	1.5
	Tractor Loans	38.1	2.6
At 100%	Housing loans	607.1	54.6
More than 100%	Commercial vehicle loans	5.0	0.6
Total		**283,388.5**	**12,945.4**

* *includes two wheeler loans and auto loans*

Securitisation exposures in trading book

- Aggregate amount of exposure securitised-out for which some exposure has been retained and which is subject to market risk approach as of September 30, 2015 was ₹ 115.1 million. The exposure type was commercial vehicle loans.

- Aggregate amount of on-balance sheet securitisation exposures retained or purchased

(₹ million)

Exposure type	**Sep 30, 2015**
Housing loans	751.7
Mixed assets*	7,604.4
Commercial vehicle loans	9,242.1
Tractor loans	5,130.7
Micro finance	1,746.9
Total	**24,475.8**

**includes auto loans, commercial vehicle loans, construction equipment loans, tractors loans and three wheeler loans*

- Off-balance sheet securitisation exposures as of September 30, 2015 were ₹ 1,192.6 million, which is risk weighted for capital adequacy purposes. The exposure type was commercial vehicle loans.

- Aggregate amount of securitisation exposures retained or purchased, subject to the securitisation framework for specific risk broken down into different risk weight bands:

  ✓ Securitisation exposures broken down into different risk weight bands at book value

(₹ million)

Risk weight band	**Sep 30, 2015**
Less than 100%	24,475.8
At 100%	-
More than 100%	-
Total	**24,475.8**

  ✓ Aggregate amount of capital requirements for securitisation exposures

(₹ million)

Risk weight band	**Sep 30, 2015**
Less than 100%	962.3
At 100%	-
More than 100%	-
Total	**962.3**

7. Market Risk in Trading Book

Market Risk Management Strategies and Processes

The Market Risk management process at the Bank consists of identification and measurement of risks, control measures and reporting systems. It ensures that the risk taking of the Bank's treasury desks and the investment banking department is within the risk appetite encapsulated within the treasury limits package that includes the equity trading limits and specific limits approved by the Board from time to time. The Board approved risk appetite is handed down as limits to the various treasury desks and the investment banking department. The prescribed limits are monitored by the treasury mid office and reported as per the guidelines laid down from time to time. The market risk objective, framework and architecture along with the functions of market risk are detailed in the Board approved Market Risk Policy.

Market Risk Architecture

The market risk process includes the following key participants:

- The Board of Directors is responsible for managing the comprehensive risks faced by the Bank. The Board will approve or suggest changes in all market risk policies and limits relating to market risk management of the Bank along with other risks.
- The Risk Policy & Monitoring Committee ('RPMC') of the Board reviews the Bank's market risk policies, procedures and limits packages and recommends the same for approval to the Board. The Committee supports the Board by supervising the implementation of the risk strategy. The Committee guides the development of policies, procedures and systems for managing risk. It ensures that these are adequate and appropriate to changing business conditions, the structure and needs of the Bank and the risk appetite of the Bank. In addition, it monitors the compliance of the Board approved risk appetite.
- The Market Risk Function covers the assessment of the market risk for treasury portfolio (including positions in the trading book arising from investment banking activity), evaluate/validate methods for monitoring market risk and prescribes control processes. In addition, market risk evaluates the market risk exposure arising from client funding transactions in respect of non-treasury business and prescribe volatility factors for collateral valuation held by the Bank to mitigate exposure on account of such transactions. The Market Risk Function also reviews the valuation models and the mnemonics definition proposed by the Treasury Analytics department. Market risk is managed under the guidance of the RPMC of the Board.
- The Treasury Mid-Office is responsible for the day to day monitoring and reporting of market risk controls, valuations etc. Mid Office reports any limit breaches to the Senior Management. Mid Office also monitors the counterparty risk exposures and maintains the market data as per the Operations Manual of Market Data Cell. The Market Data Cell also verifies the rates submitted by the Treasury Front Office for polling of various benchmarks. The Mid-Office functions for all locations (including overseas branches), is centrally located.
- The Investment Committee oversees and reviews any direct investments in Shares, Convertible Bonds, Convertible Debentures and any other Equity linked instruments.
- Treasury Desks among others include Foreign Exchange, Money Market, Interest Rate Trading, Trading Derivatives, Equities and Precious Metal desks which carry out the basic day to day management of the various

portfolios and the underlying market risk within the stipulated market risk limits and other applicable limits, policies and procedures. Treasury desks also participate in the polling of various benchmarks as mandated by the Bank's policy on benchmark submission. The Treasury Advisory Group interacts with Bank's customers and proposes suitable treasury products to the clients to meet the customers' balance sheet hedging requirements.

- Treasury Analytics unit is responsible for model validation and maintenance of the policy laid down for model valuation and validation including prescription for market data sources and mnemonics definitions/ conventions, which are further reviewed by Market Risk.

Market Risk Limits Reporting

Types of limits could include position limits, gap limits, tenor and duration limits, PV01 limits, basic risk limits, stop loss trigger level, value-at-risk limits and option Greek limits. In addition, deal size limit is prescribed for foreign exchange contracts traded on trading platforms to avoid fat-finger errors apart from specific position and exposure limits in exchange traded currency and interest rate derivatives. These limits may or may not apply to all portfolios and are appropriately selected as market risk controls in the various limits packages. The market risk limits are measured and monitored by the Mid Office, and subsequently reported to the concerned departments/ senior management. Any major variations in the utilisations of the limit are analysed and reviewed with Market Risk prior to circulation of reports. Any breach in the limits is acted upon by Treasury Front Office as per the Board approved processes.

The Bank enters into derivative deals with counterparties based on their financial strength and understanding of derivative products and its risks. In this regard, the Bank has a Customer Suitability and Appropriateness Policy in place. The Bank sets up appropriate counterparty/client limits considering the ability of the counterparty to honor its obligations in the event of crystallisation of the exposure. Appropriate credit covenants are stipulated wherever required to contain risk and to facilitate trigger events such as call for additional collaterals, terminate a transaction, etc. The Bank also books derivative deals to hedge the interest rate/currency risks in borrowings or investments within the ambit of Bank's hedging processes and policies. The Bank has adopted CVA capital charge and provides for incurred CVA losses on the derivative positions.

Market risk capital requirement

(₹ million)

Standardised duration approach	**Sep 30, 2015**
Interest rate risk	20,495.3
Equity risk	2,216.6
Foreign exchange risk (including gold)	1,215.0
Total	**23,926.9**

8. Operational Risk

Operational risk is the risk of loss resulting from inadequate or failed internal processes, people and systems or from external events. The way operational risk is managed has the potential to positively or negatively impact a bank's customers, its financial performance and reputation. The Bank has put in place Board approved governance and organisational structure with clearly defined roles and responsibilities to mitigate operational risk arising out of the Bank's business and operations.

Governance and Organisational Structure for Managing Operational Risk

The RPMC of the Board reviews and recommends to the Board of Directors the overall operational risk management framework for the Bank. A committee comprised of senior management personnel namely Operational Risk Management Committee ('ORMC') oversees the implementation of operational risk management framework approved by the Board. The ORMC is headed by the Deputy Managing Director and the other senior management personnel forming part of the Committee include the Chief Risk Officer, Head – Audit, Head – Operations and senior representatives from relevant business functions. An independent operational risk management department is responsible for the implementation of the framework across the Bank. Board approved operational risk management policy stipulates the roles and responsibilities of employees, business units, operations and support function in managing operational risk.

Risk Measurement and Monitoring

While the day-to-day operational risk management lies with business lines, operations and support functions, the ORMD is responsible for designing tools and techniques for identification and monitoring of operational risk across the Bank consistent with the framework approved by the Board. The ORMD also ensures operational risk exposures are captured and reported to the relevant levels of the management for initiating suitable risk mitigations in order to contain operational risk exposures within acceptable levels. The Internal audit department provides an independent assurance on the effectiveness of governance, risk management and internal controls to achieve risk management and control objectives.

The Bank applies a number of risk management techniques to effectively manage operational risks:

- New products are rolled out after putting in place the required mitigants based on risk assessment and on ensuring required skill sets and technological resources are in place.

- A bottom up risk assessment process, Risk and Control Self-Assessment identifies high risk areas so that the Bank can initiate timely remedial measures. This assessment is conducted at half-yearly rests to update senior management, of the risk levels across the Bank.

- Key Risk Indicators are employed to alert the Bank on impending problems in a timely manner. These allow monitoring of the control environment as well as operational risk exposures and trigger risk mitigation actions.

- Material operational risk losses are subjected to detailed risk analysis to identify areas of risk exposures and gaps in controls basis which appropriate risk mitigating actions are initiated.

- Bank conducts periodic scenario analysis to derive information on hypothetical severe loss situations and use the information for risk management actions, apart from analysing the plausible financial impact.

- Periodic reporting on risk assessment and monitoring is made to the line as well as to senior management to ensure timely actions are initiated at all levels.

Information Technology Risk and Information Security

Bank operates in a highly automated environment and makes use of latest technological framework for supporting various operations. Use of technology brings in newer kind of operational risks like business disruption, risks related to information assets, data security, integrity, reliability and availability etc. Bank has put in a governance framework, information security practices and business continuity plan to mitigate information technology related risks. An independent assurance team as part of the internal audit provides assurance on the management of information technology related risks.

Bank has a robust Business Continuity and Disaster Recovery plan which is periodically tested to ensure they are capable of meeting the contingency needs of the bank.

There is an independent information security group which addresses information security related risks. A well-documented, Board approved information security policy is put in place. Mandatory information security trainings are administered to the employees of the bank. Periodical sensitization exercise is ensured to update employees on information security practices.

Capital Requirement

The Bank has devised an operational risk measurement system compliant with Advanced Measurement Approach (AMA) for estimating operational risk capital charge for the Bank. The Bank has made an application with the RBI for migrating to AMA. Based on Bank's application and on the basis of the assessment of the bank's preparedness, RBI had granted in principle approval to migrate to AMA for calculating operational risk capital charge on parallel run basis at solo bank level. Currently the Bank follows the Basic Indicator Approach for estimating operational risk capital.

9. Asset Liability Management ('ALM') Risk Management

ALM risk management process consists of management of Liquidity Risk and Interest Rate Risk in the Banking Book ('IRRBB'). Liquidity risk is the risk that the Bank may not be able to fund increases in assets or meet obligations as they fall due without incurring unacceptable losses. IRRBB refers to the potential adverse financial impact on the Bank's banking book from changes in interest rates. The banking book is comprised of assets and liabilities that are contracted on account of relationship or for steady income and statutory obligations and are generally held till maturity. The Bank carries various assets, liabilities and off-balance sheet items across markets, maturities and benchmarks exposing it to risks from changing interest rates. The Bank's objective is to maintain liquidity risk and IRRBB within tolerable limits.

Structure and Organisation

The ALM risk management process of the Bank operates in the following hierarchical manner:

- **Board of Directors**
  The Board has the overall responsibility for management of liquidity and interest rate risks. The Board decides the strategy, policies and procedures of the Bank to manage liquidity and interest rate risk including setting of risk tolerance/limits and reviewing of stress test results.

- **Risk Policy & Monitoring Committee ('RPMC') of the Board**
  The RPMC is responsible for evaluating the overall risks faced by the Bank including liquidity and interest rate risks. The RPMC also addresses the potential interaction of liquidity risk and interest rate risk with the other risks faced by the Bank.

- **Asset Liability Committee ('ALCO')**
  ALCO is a decision-making unit responsible for ensuring adherence to the risk tolerance/limits set by the Board as well as implementing the liquidity and interest rate risk management strategy of the Bank in line with the Bank's risk management objectives and risk tolerance. The ALCO is also responsible for balance sheet planning from risk-return perspective including strategic management of liquidity and interest rate risks. The role of the ALCO includes the following:

  i. Product pricing for deposits and advances
  ii. Deciding the desired maturity profile and mix of incremental assets and liabilities
  iii. Articulating interest rate view of the Bank and deciding on the future business strategy
  iv. Reviewing and articulating funding strategy
  v. Ensuring the adherence to the limits set by the Board of Directors
  vi. Determining the structure, responsibilities and controls for managing liquidity and interest rate risk
  vii. Ensuring operational independence of risk management function
  viii. Reviewing stress test results
  ix. Deciding on the transfer pricing policy of the Bank

- **ALM Operational Groups**
  Internal ALM operational groups support the ALM organisation.

Risk Measurement Systems and reporting:

Liquidity Risk

Liquidity Risk is measured using flow approach and stock approach. Flow approach involves comprehensive tracking of cash flow mismatches. Stock approach involves measurement of critical ratios in respect of liquidity risk. Analysis of liquidity risk also involves examining how funding requirements are likely to be affected under crisis scenarios. The Bank has a Board approved liquidity stress framework guided by the regulatory instructions. The Bank has an extensive intraday liquidity risk management framework for monitoring intraday positions during the day.

Interest Rate Risk in banking book (IRRBB)

Interest rate risk is the risk where changes in market interest rates affect a bank's financial position. Changes in interest rates impact a bank's earnings through changes in its Net Interest Income (NII). Changes in interest rates also impact a bank's Market Value of Equity (MVE) or Net Worth through changes in the economic value of its rate sensitive assets, liabilities and off-balance sheet positions. The interest rate risk, when viewed from these two perspectives, is known as 'earnings perspective' and 'economic value perspective', respectively.

The Bank measures and controls IRRBB using both Earnings Perspective (measured using Traditional Gap Analysis) and Economic Value Perspective (measured using Duration Gap Analysis). These methods involve bucketing of rate sensitive assets (RSA) and rate sensitive liabilities (RSL), including off-balance sheet items, based on the maturity/repricing dates.

The Bank classifies an asset/liability as rate sensitive if:

i. Within the time interval under consideration, there is a cash flow
ii. The interest rate resets / reprices contractually during the interval
iii. RBI changes the interest rates in cases where interest rates are administered.

Significant portion of non-maturing deposits (Current Account and Saving Account) is bucketed in "over 1 year – 3 year". Non-rate sensitive liabilities and assets primarily comprise of capital, reserves and surplus, other liabilities, cash and balances with RBI, current account balances with banks, fixed assets and other assets.

The Banking Book is represented by excluding from the total book the trading book (on and off balance sheet items) and the commensurate liabilities in the form of short term borrowings and deposits.

- **Earnings Perspective (impact on net interest income)**

  Traditional Gap Analysis (TGA) measures the level of a bank's exposure to interest rate risk in terms of sensitivity of its NII to interest rate movements over one year horizon. It involves bucketing of all rate sensitive assets (RSA) and rate sensitive liabilities (RSL) and off balance sheet items maturing or getting repriced in the next one year and computing change of income under 200 basis points upward and downward parallel rate shocks over a one year horizon. Assumption on asset/liability bucketing used in the traditional gap analysis is as per the RBI guidelines.

  The increase / decline in earnings for an upward / downward rate shock of 200 basis points ('bps'), broken down by currency, are as follows:

(₹ million)

Currency	Sep 30, 2015	
	If interest rate were to go down by 200 bps	**If interest rate were to go up by 200 bps**
INR	(27,338.8)	27,338.8
USD	(1,184.8)	1,184.8
Others	123.6	(123.6)
Total	**(28,400.0)**	**28,400.0**

Note: If we compute the NII impact across all tenor buckets including current and savings balances, with a 200 bps shock the overall NII impact would be only around ₹ 10,357 million.

- **Economic Value Perspective (impact on market value of equity)**

  While earnings perspective calculates the short-term impact of the rate changes, the Economic Value Perspective calculates the long-term impact on the market value of equity (MVE) of the Bank through changes in the economic value of its rate sensitive assets, liabilities and off-balance sheet positions. Economic value perspective is measured using Duration Gap Analysis (DGA). DGA involves computing of the Modified Duration Gap (MDG) between RSA and RSL and thereby the Duration of Equity (DoE). The DoE is a measure of sensitivity of market value of equity to changes in interest rates. Using the DoE, the Bank estimates the change in MVE under 200 basis points upward and downward parallel rate shocks. Assumptions on asset/liability bucketing, coupons and yields to be used in the duration gap analysis are as per the RBI guidelines.

  The increase / decline in economic value for an upward / downward rate shock of 200 basis points (‘bps’), broken down by currency, are as follows:

(₹ million)

Currency	Sep 30, 2015	
	If interest rate were to go down by 200 bps	**If interest rate were to go up by 200 bps**
INR	25,551.3	(25,551.3)
USD	(2,701.8)	2,701.8
Others	(1,844.8)	1,844.8
Total	**21,004.7**	**(21,004.7)**

10. General Disclosures for Exposures Related to Counterparty Credit Risk

Counterparty Credit Risk (‘CCR’) limits for the banking counterparties are assessed based on an internal model that considers the parameters viz. credit rating and net worth of counterparties, net worth of the Bank and business requirements. In all other cases, CCR limit is approved based on credit assessment process followed by the Bank as per the Credit Policies and Procedures Manual. CCR limits are set on the amount and tenor while fixing the limits to respective counterparties with distinct limits for each type of exposure. Capital for CCR exposure is assessed based on Standardised Approach (both for default risk capital and CVA capital charges).

The Bank has entered into Credit Support Annex (‘CSA’) agreements with some of the major international counterparty banks. CSA defines the terms or rules under which collateral is posted or transferred between derivative counterparties to mitigate the credit risk arising from "in the money" derivative positions on OTC Derivative contracts.

Exposure to Central counterparties arising from over-the-counter derivative trades, exchange traded derivatives transactions and security financing transactions (SFTs), attracts capital charges applicable to Central Counterparty. Applicable risk weights for trades, guaranteed by central counterparties, which are recognised as qualifying central counterparty (QCCP) by Reserve Bank of India or SEBI, are comparatively lower than OTC deals.

In India, presently there are four QCCPs viz. Clearing Corporation of India (CCIL), National Securities Clearing Corporation Ltd (NSCCL), Indian Clearing Corporation Ltd (ICCL) and MCX-SX Clearing Corporation Ltd (MCX-

SXCCL). These QCCPs are subjected, on an ongoing basis, to rules and regulations that are consistent with CPSS-IOSCO Principles for Financial Market Infrastructures.

The Bank does not recognise bilateral netting. The derivative exposure is calculated using Current Exposure Method ('CEM'). The balance outstanding as on September 30, 2015 is given below.

(₹ million)

Particulars	Sep 30, 2015	
	Notional Amounts	Current Exposure
Foreign exchange contracts	6,552,254.6	181,338.2
Interest rate derivative contracts	2,263,628.2	27,354.4
Currency swaps	100,921.1	17,154.5
Currency Options	296,459.1	4,196.2
Total	**9,213,263.0**	**230,043.3**

11. Equities – Disclosure for Banking Book Positions

In accordance with the RBI guidelines on investment classification and valuation, Investments are classified on the date of purchase into "Held for Trading" ('HFT'), "Available for Sale" ('AFS') and "Held to Maturity" ('HTM') categories (hereinafter called "categories"). Investments which the Bank intends to hold till maturity are classified as HTM securities. In accordance with the RBI guidelines, equity investments held under the HTM category are classified as banking book for capital adequacy purpose.

Investments in equity of subsidiaries and joint ventures (a Joint Venture would be one in which the bank, along with its subsidiaries, holds more than 25 percent of the equity) are required to classified under HTM category in accordance with the RBI guidelines. These are held with a strategic objective to maintain strategic relationships or for strategic business purposes.

Investments classified under HTM category are carried at their acquisition cost and not marked to market. Any diminution, other than temporary, in the value of equity investments is provided for. Any loss on sale of investments in HTM category is recognised in the Statement of Profit and Loss. Any gain from sale of investments under HTM category is recognised in the Statement of Profit and Loss and is appropriated, net of taxes and statutory reserve, to "Capital Reserve" in accordance with the RBI Guidelines.

Equity shares under the banking book are the Bank's investments in unquoted equity shares of its associate companies. The book value of these investments aggregated ₹ 311.9 million as of September 30, 2015 under regulatory scope of consolidation. There has been no sale or liquidation of these investments during the half year ended September 30, 2015. The Bank has not recognised any unrealised gain or loss in the consolidated balance sheet or the consolidated profit and loss account. These investments are risk weighted for capital adequacy purposes. The capital requirement for credit risk relating to these investments amounted to ₹ 70.3 million as of September 30, 2015.

12. Composition of Capital

Disclosures pertaining to composition of capital, including the capital disclosure templates, main features of equity and debt capital instruments and the terms and conditions of equity and debt capital instruments have been disclosed separately on the Bank's website under the 'Regulatory Disclosures Section'. The link to this section is http://www.hdfcbank.com/aboutus/basel_disclosures/default.htm.