Consolidated Position as on December 31, 2018

1. 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 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 Liquidity Risk
- Intraday Credit Risk
- Model Risk

- Credit Concentration Risk
- Business Risk
- Strategic Risk
- Compliance Risk
- Reputation Risk
- Technology Risk
- Group Risk
- Counterparty Credit Risk

The Bank has implemented a Board approved Stress Testing Policy & 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 at consolidated level including subsidiaries (HDB Financial Services Limited and HDFC Securities Limited) in order to assess the impact on capital adequacy of the Group. 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.



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

The minimum capital requirements under Basel III are being phased-in as per the guidelines prescribed by RBI. Accordingly, the Bank is required to maintain a minimum CET1 capital ratio of 7.525% a minimum Tier 1 capital ratio of 9.025% and a minimum total capital ratio of 11.025% as on December 31, 2018. The given minimum capital requirement includes capital conservation buffer of 1.875% and additional CET1 requirement of 0.15% on account of the Bank being identified as a Domestic Systemically Important Bank (D-SIB). The Bank's position in this regard is as follows:

Particulars	Standalone	Consolidated
raticulais	Dec 31, 2018	Dec 31, 2018
CET1 capital ratio	14.9%	14.8%
Tier 1 capital ratio	15.8%	15.6%
Total capital ratio	17.3%	17.0%

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

Capital requirements for credit risk

(`million)

Particulars	Dec 31, 2018
Portfolios subject to standardised approach	880,268.4
Securitisation exposures	28,304.0
Total	908,572.4

Capital requirements for market risk

(`million)

Standardised duration approach	Dec 31, 2018
Interest rate risk	29,200.8
Equity risk	31,947.0
Foreign exchange risk (including gold)	1,116.3
Total	62,264.1

Capital requirements for operational risk

Particulars	Dec 31, 2018
Basic indicator approach	98,307.5



2. 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, auto loans, personal loans and small commercial vehicle 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	Dec 31, 2018			
Exposure distribution	Fund based	Non-fund based	Total	
Domestic	8,734,956.2	1,107,892.6	9,842,848.8	
Overseas	274,169.4	12,704.4	286,873.8	
Total	9,009,125.6	1,120,597.0	10,129,722.6	

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)

	As on Dec 31, 2018		
Industry	Fund based	Non-fund based	
Agriculture - Allied	176,308.4	1,429.3	
Agriculture Produce - Trade	92,727.6	7,772.9	
Agriculture Production - Food	277,362.3	974.2	
Agriculture Production - Non food	187,838.0	26.0	
Automobile & Auto Ancillary	330,628.5	39,672.2	
Banks and Financial Institutions	224,650.8	62,721.9	
Business Services	234,376.1	9,890.5	
Capital Market Intermediaries	39,009.7	34,771.9	
Cement & Products	90,892.5	15,395.4	
Chemical and Products	76,347.1	14,466.4	
Coal & Petroleum Products	64,377.3	194,693.1	
Consumer Durables	60,651.4	11,203.8	
Consumer Loans	2,451,230.3	1.3	
Consumer Services	321,375.6	17,727.9	
Drugs and Pharmaceuticals	59,794.4	9,484.7	
Engineering	152,508.8	112,538.9	
Fertilisers & Pesticides	71,855.1	22,282.2	
FMCG & Personal Care	27,278.2	7,264.8	
Food and Beverage	206,283.9	17,382.9	
Gems and Jewellery	100,450.3	8,957.5	
Housing Finance Companies	204,372.9	1,724.8	
Information Technology	32,568.0	13,613.9	
Infrastructure Development	124,944.4	69,353.9	
Iron and Steel	198,139.2	46,379.8	
Mining and Minerals	57,352.1	12,171.9	
NBFC / Financial Intermediaries	456,000.3	22,994.3	
Non-ferrous Metals	70,703.5	30,339.6	
Paper, Printing and Stationery	41,385.6	3,146.5	
Plastic & Products	49,008.8	5,834.9	
Power	221,053.2	39,657.2	
Real Estate & Property Services	251,143.3	31,192.6	
Retail Trade	431,445.1	16,049.5	
Road Transportation	353,614.3	8,185.3	
Telecom	246,163.7	29,672.7	
Textiles & Garments	178,822.7	28,519.1	
Wholesale Trade - Industrial	184,591.6	28,489.2	
Wholesale Trade - Non Industrial	191,000.2	13,821.0	
Other Industries*	470,870.4	130,793.0	
Tot	al 9,009,125.6	1,120,597.0	

Covers industries such as airlines, animal husbandry, fishing, glass & products, leather & products, media & entertainment, 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 consumer loans) in excess of 5% of total exposure: Nil

Residual contractual maturity breakdown of assets

As on Dec 31, 2018

Maturity buckets	Cash and balances with RBI	Balances with banks and money at call and short notice	Investments	Advances	Fixed assets	Other assets	Total
1 Day	139,403.3	37,098.1	801,992.4	64,598.1	-	183.6	1,043,275.5
2 to 7 Days	11,454.1	33,029.9	115,480.8	166,185.7	-	2,310.3	328,460.8
8 to 14 Days	6,843.0	-	33,166.6	112,130.3	-	5,812.8	157,952.7
15 to 30 Days	7,839.1	1,374.6	75,086.2	253,970.1	-	63,053.8	401,323.8
31 Days & upto 2 Months	16,864.0	1,960.4	89,573.6	338,655.0	-	14,586.4	461,639.4
Over 2 Months & upto 3 Months	14,223.0	3,357.6	81,141.7	330,021.3	-	15,939.1	444,682.7
Over 3 Months & upto 6 Months	33,012.4	271.9	175,259.5	689,453.9	-	23,376.2	921,373.9
Over 6 Months & upto 1 Year	48,043.2	3,662.7	263,492.1	956,878.8	-	18,885.4	1,290,962.2
Over 1 Year & upto 3 Years	139,858.2	120.8	722,889.8	3,717,397.7	-	264,752.3	4,845,018.8
Over 3 Years & upto 5 Years	4,689.5	-	88,609.1	866,141.8	-	32,446.9	991,887.3
Over 5 Years	68,707.8	166.2	315,552.0	783,099.0	40,561.1	41,585.0	1,249,671.1
Total	490,937.6	81,042.2	2,762,243.8	8,278,531.7	40,561.1	482,931.8	12,136,248.2



Asset quality

NPA ratios

Particulars	Dec 31, 2018
Gross NPAs to gross advances	1.43%
Net NPAs to net advances	0.48%

Amount of Net NPAs

(`million)

Particulars	Dec 31, 2018
Gross NPAs	119,409.4
Less: Provisions	79,961.6
Net NPAs	39,447.8

Classification of Gross NPAs

(`million)

Particulars	Dec 31, 2018
Sub-standard	68,319.6
Doubtful	
■ Doubtful 1	22,155.2
■ Doubtful 2	11,881.2
■ Doubtful 3	4,812.0
Loss	12,241.4
Total Gross NPAs	119,409.4

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

Particulars	Dec 31, 2018
Opening balance	92,996.0
Additions during the year	125,148.8
Reductions	(98,735.4)
Closing balance	119,409.4



Movement of provisions for NPAs

(`million)

Particulars	Dec 31, 2018
Opening balance	62,814.3
Provisions made during the year	79,178.2
Write-off	(40,106.5)
Any other adjustment, including transfer between provisions	-
Write-back of excess provisions	(21,924.4)
Closing balance	79,961.6

Recoveries from written-off accounts aggregating ` 11,477.6 million and write-offs aggregating ` 40,106.5 million have been recognised in the statement of profit and loss.

Non-performing investments

(`million)

Particulars	Dec 31, 2018
Gross non-performing investments	905.5
Less: Provisions	782.0
Net non-performing investments	123.5

Provision for depreciation on investments

(`million)

Particulars	Dec 31, 2018
Opening balance	2,615.2
Provisions made during the year	2,487.9
Write-off	(324.5)
Any other adjustment, including transfer between provisions	-
Write-back of excess provisions	(38.2)
Closing balance	4,740.4

Movement in provisions held towards depreciation on investments have been reckoned on a year to date basis.



Provision for standard assets

(`million)

Particulars	Dec 31, 2018
Opening balance	31,611.5
Provisions made/reversed during the year	4,816.7
Any other adjustment, including transfer between provisions*	19.2
Closing balance	36,447.4

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

Geographic distribution

Particulars	Dec 31, 2018				
ranticulais	Domestic Overseas Total				
Gross NPA	118,525.2	884.2	119,409.4		
Provisions for NPA	79,564.2	397.4	79,961.6		
Provision for standard assets	36,215.9	231.5	36,447.4		



Industry-wise distribution

		As on Dec 31, 2018			For nine months ended Dec 31, 2018	
Industry		Gross NPA	Provisions for NPA	Provision for standard assets	Write offs	Provisions for NPA
Agriculture - Allied		7,039.7	5,197.2	714.3	1,262.3	2,164.3
Agriculture Produce - Trade		2,662.8	2,108.7	343.9	145.1	1,272.3
Agriculture Production - Food		17,190.2	11,712.1	690.7	35.5	5,034.4
Agriculture Production - Non food		5,528.5	2,951.9	505.0	2,048.4	2,632.1
Automobile & Auto Ancillary		3,231.6	2,786.8	1,446.9	552.0	984.9
Banks and Financial Institutions		19.1	9.1	591.6	46.1	18.8
Business Services		2,639.8	1,489.3	925.9	1,471.6	1,576.1
Capital Market Intermediaries		27.5	11.1	167.3	-	11.1
Cement & Products		106.8	52.2	357.5	64.5	48.2
Chemical and Products		187.1	112.8	311.2	138.9	61.8
Coal & Petroleum Products		177.9	119.6	245.0	60.6	81.1
Consumer Durables		264.7	156.3	244.5	218.1	254.1
Consumer Loans		21,335.9	11,322.2	9,872.7	18,265.5	21,282.2
Consumer Services		3,609.6	2,476.4	1,305.1	1,040.3	1,445.6
Drugs and Pharmaceuticals		334.4	247.4	242.9	51.8	53.6
Engineering		1,553.3	871.0	650.8	228.4	545.5
Fertilisers & Pesticides		33.2	8.8	456.2	0.3	8.5
FMCG & Personal Care		209.0	82.6	114.1	121.7	160.7
Food and Beverage		7,938.1	6,407.0	862.2	704.5	2,648.1
Gems and Jewellery		1,121.7	958.9	329.2	312.1	144.3
Housing Finance Companies		-	-	594.2	-	-
Information Technology		693.8	466.3	152.8	137.5	194.1
Infrastructure Development		4,159.3	3,678.4	455.6	295.7	775.3
Iron and Steel		1,018.6	853.4	2,055.6	663.1	(666.5)
Mining and Minerals		1,274.1	633.2	215.0	102.8	548.7
NBFC / Financial Intermediaries		74.7	62.7	1,150.2	54.6	32.7
Non-ferrous Metals		175.4	84.4	283.5	233.3	255.1
Paper, Printing and Stationery		1,898.4	1,687.4	170.5	62.6	206.1
Plastic & Products		159.6	104.9	202.7	68.4	64.6
Power		82.6	75.9	770.1	14.0	(1.6)
Real Estate & Property Services		4,152.5	3,330.4	2,068.2	360.2	392.5
Retail Trade		7,278.6	4,123.4	1,522.4	4,326.0	4,633.2
Road Transportation		4,839.3	2,451.8	1,301.1	1,966.7	2,444.2
Telecom		1,199.7	699.5	1,147.2	23.3	307.9
Textiles & Garments		2,495.5	1,783.8	728.1	826.2	1,021.3
Wholesale Trade - Industrial		3,554.8	3,027.9	715.2	443.3	506.3
Wholesale Trade - Non Industrial		3,213.8	2,598.1	807.4	316.0	407.0
Other Industries		7,927.8	5,218.7	1,730.6	3,445.1	4,478.8
	Total	119,409.4	79,961.6	36,447.4	40,106.5	56,027.4



3. 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	Dec 31, 2018
Below 100% risk weight	4,280,638.0
100% risk weight	2,240,785.8
More than 100% risk weight	3,607,037.6
Deducted	1,261.2
Total	10,129,722.6

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	А	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	А3	A4 & D	Unrated*
Risk weight	20%	30%	50%	100%	150%	100%

^{*} As per RBI circular dated August 25, 2016 claims on corporates, AFCs, and NBFC-IFCs having aggregate exposure from banking system of more than ` 100 crore which were rated earlier and subsequently have become unrated will attract a risk weight of 150%.



^{*} With effect from June 30, 2017, the Bank has risk weighted all unrated claims on corporates, AFCs, and NBFC-IFCs having aggregate exposure from banking system of more than ` 200 crore at 150%.

- 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 ratings corresponding to the two lowest risk weights are referred and the higher of those two risk weights is applied, i.e., the second lowest 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 ratings corresponding to the two lowest risk weights are referred and the higher of those two risk weights is applied, i.e., the second lowest 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.

4. Composition of Capital

Disclosures pertaining to main features of equity and debt capital instruments, the terms and conditions of equity and debt capital instruments and leverage ratio have been disclosed separately on the Bank's website under the 'Regulatory Disclosures Section'. The link to the Regulatory Disclosures Section is as follows:

http://www.hdfcbank.com/aboutus/basel_disclosures/default.htm

