

PUNJAB NATIONAL BANK

Disclosure under Basel II (Pillar 3) in terms of Revised Capital Adequacy Framework – for year ended 31.03.2017

Disclosures in this report pertain to Punjab National Bank (Solo). The Capital to Risk-weighted Assets Ratio (CRAR) of the bank and its five subsidiaries on stand-alone basis are shown separately in para 3.7.

DF-1. Scope of application

- 1.1. Punjab National Bank is the top bank in the group to which the revised capital adequacy framework applies. The bank has following three domestic subsidiaries:

	Name of the Entity	Country of incorporation	Proportion of ownership percentage
i)	PNB Gilts Ltd.	India	74.07%
ii)	PNB Investment Services Ltd.	India	100.00%
iii)	PNB Insurance Broking Pvt Ltd.*	India	81.00%

*The company is non functional and steps are being taken for winding up of the company as the license has already been surrendered on 14.02.2011.

Apart from these, the Bank has two International Subsidiaries

	Name of the Entity	Country of incorporation	Proportion of ownership percentage
i)	PNB International Ltd., UK	UK	100.00%
ii)	Druk PNB Bank Ltd.	Bhutan	51.00%

- 1.2 Bank is having 20% or more stake in following Domestic/overseas entities (Associates)

	Name of the Entity	Country of incorporation	Proportion of ownership percentage
i)	Principal PNB Asset Management Co. Pvt. Ltd	India	21.38%
ii)	Principal Trustee Co. Pvt. Ltd.	India	30%
iii)	PNB Housing Finance Ltd.	India	39.08%
iv)	Sarv Haryana Gramin Bank, Rohtak	India	35%
v)	Himachal Pradesh Gramin Bank, Mandi	India	35%
vi)	Madhya Bihar Gramin Bank	India	35%
vii)	Punjab Gramin Bank, Kapurthala	India	35%
viii)	Sarva UP Gramin Bank, Meerut	India	35%
ix)	PNB Metlife India Insurance Company Ltd	India	30%
x)	JSC Tengri Bank, Almaty, Kazakhstan	Kazakhstan	49%

The Bank has one Joint Venture outside India

	Name of the Entity	Country of incorporation	Proportion of ownership percentage
i)	Everest Bank Ltd.	Nepal	20%

1.3. Position of Capital

(₹.in crore)

Particulars	31.03.2017	31.03.2016
The aggregate amount of capital deficiencies in all subsidiaries not included in the consolidation i.e. that are deducted and the name(s) of such subsidiaries	There is no capital deficiency in any of the subsidiaries	There is no capital deficiency in any of the subsidiaries

1.4. The bank is not directly involved in insurance activity. However, bank has invested in the share capital of the following insurance related subsidiaries/Associates:

S. No.	Name of the company	Country of Incorporation	Proportion of ownership	Face Value (₹ in crore)	Book value (₹in crore)
i)	PNB Insurance Broking Pvt. Ltd*	India	81%	4.05	11.73
ii)	PNB Metlife India Insurance Company Ltd	India	30%	603.86	0.0001

* The company is non functional and steps are being taken for winding up of the company as the license has already been surrendered on 14.02.2011.

DF-2. Capital Structure: As on 31.03.2017.

2.1 Bank's Tier I capital comprises of Equity Shares, Reserves and Innovative Perpetual Bonds.

Bank has issued Innovative Perpetual Bonds (Tier 1 capital) and also other bonds eligible for inclusion in Tier 2 capital. Some of the important terms of the bonds are as under:

a. Perpetual Unsecured Non-Convertible Subordinated Bonds in the nature of Promissory Notes (Tier I Bonds)/ Basel III compliant Additional Tier I Unsecured Listed Non-Convertible Redeemable Bonds

Series	Date of Allotment	Bond Amount (Rs in Crs)	Coupon Rate*	Tenor	Call option*	Put Option
I	20.07.2007	500	10.40% annual for first 10 Years. Step up Coupon Rate of 10.90% annual for all subsequent years if call option is not exercised at the end of 10 th year from the date of allotment	Perpetual	At par at the end of 10 th year from date of allotment and thereafter on each coupon date (with prior RBI permission)	None
II	11.12.2007	300	9.75% annual for first 10 years. Step up Coupon Rate of 10.25% annual for all subsequent years if call option is not exercised at the end of 10 th year from the date of allotment.	Perpetual	At par at the end of 10 th year from date of allotment and thereafter on each coupon date (with prior RBI permission)	None
III	18.01.2008	300	9.45% annual for first 10 years. Step up Coupon Rate of 9.95% annual for all subsequent years if call option is not exercised at the end of 10 th year from the date of allotment	Perpetual	At par at the end of 10 th year from date of allotment and thereafter on each coupon date (with prior RBI permission)	None
IV	19.01.2009	220.50	8.90% annual for first 10 years. Step up Coupon Rate of 9.40% annual for all subsequent years if call option is not exercised at the end of 10 th year from the date of allotment.	Perpetual	At par at the end of 10 th year from date of allotment and thereafter on each coupon date (with prior RBI permission)	None
V	28.08.2009	500	9.15% annual for first 10 years. Step up Coupon Rate of 9.65% annual for all subsequent years if call option is not exercised at the end of 10 th year from the date of allotment.	Perpetual	At par at the end of 10 th year from date of allotment and thereafter on each coupon date (with prior RBI permission)	None
VI	27.11.2009	200	9.00% annual for first 10 years. Step up Coupon Rate of 9.50% annual for all subsequent years if call option is not exercised at the end of 10 th year from the date of allotment.	Perpetual	At par at the end of 10 th year from date of allotment and thereafter on each coupon date (with prior RBI permission)	None
VII	13.02.2015	1500	9.15% annual with the call option at the end of 10 year from the date of allotment	Perpetual	At par at the end of 10 th year from date of allotment and thereafter on each coupon date	None

					(with prior RBI permission)	
VIII	03.03.2017	1500	8.95% annual with the call option at the end of 5th year from the date of allotment	Perpetual	At par at the end of 5 th year from date of allotment and thereafter on each coupon date (with prior RBI permission)	None
IX	29.03.2017	500	9.21% annual with the call option at the end of 5th year from the date of allotment	Perpetual	At par at the end of 5 th year from date of allotment and thereafter on each coupon date (with prior RBI permission)	None
X	31.03.2017	250	9.21% annual with the call option at the end of 5 th year from the date of allotment	Perpetual	At par at the end of 5 th year from date of allotment and thereafter on each coupon date (with prior RBI permission)	None
TOTAL		5770.50				

* Subject to RBI guidelines

b. Unsecured Redeemable Non-Convertible Subordinated Bonds in the nature of Promissory Notes (Upper Tier 2 bonds).

Series	Date of Allotment	Bond Amount (Rs. in cr)	Coupon Rate*	Tenor	Call Option*	Put Option	Redemption/ Maturity*
I	12.12.2007	500	Interest at the rate of 9.35% p.a. payable annually. If the call option is not exercised at the end of 10 th year from date of allotment then the bonds shall carry the interest of 9.85% payable annually for the last five years i.e. 11 th to 15 th year	15 years	At par at the end of 10 th year from the date of allotment (with prior RBI permission)	None	At par at the end of the 15th year from the date of allotment, if the call option is not exercised at the end of 10 th year.
II	05.03.2008	510	Interest at the rate of 9.35% p.a. payable annually. If the call option is not exercised at the end of 10 th year from date of allotment then the bonds shall carry the interest of 9.85% payable annually for the last five years i.e. 11 th to 15 th year	15 years	At par at the end of 10 th year from the date of allotment (with prior RBI permission)	None	At par at the end of the 15th year from the date of allotment, if the call option is not exercised at the end of 10 th year.
III	27.03.2008	600	Interest at the rate of 9.45% p.a. payable annually. If the call option is not exercised at the end of 10 th year from date of allotment then the bonds shall carry the interest of 9.95% payable annually for the last five years i.e. 11 th to 15 th year	15 years	At par at the end of 10 th year from the date of allotment (with prior RBI permission)	None	At par at the end of the 15th year from the date of allotment, if the call option is not exercised at the end of 10 th year.
IV	29.09.2008	500	Interest will be paid at the rate of 10.85% p.a. payable annually. If the call option is not exercised at the end of 10 th year from the date of allotment then the bonds shall carry the interest of 11.35% payable annually for the last five years i.e. 11 th to 15 th year.	15 years	At par at the end of 10 th year from the date of allotment (with prior RBI permission)	None	At par at the end of the 15 th year from the date of allotment, if the call is not exercised at the end of 10 th year.
V	22.12.2008	500	Interest will be paid at the rate of 8.95% p.a. payable annually. If the call option is not exercised at the end of 10 th year from the date of allotment then the bonds shall carry the interest of 9.45% payable annually for the last five years i.e. 11 th to 15 th year.	15 years	At par at the end of 10 th year from the date of allotment (with prior RBI permission)	None	At par at the end of the 15 th year from the date of allotment, if the call is not exercised at the end of 10 th year.
VI	18.02.2009	1000	Interest will be paid at the rate of 9.15% p.a. payable annually. If the call option is not exercised at the end of 10 th year from the date of allotment then the bonds shall carry the interest of 9.65% payable annually for the last five years i.e. 11 th to 15 th year.	15 years	At par at the end of 10 th year from the date of allotment (with prior RBI permission)	None	At par at the end of the 15 th year from the date of allotment, if the call is not exercised at the end of 10 th year
VII	21.04.2009	500	Interest will be paid at the rate of 8.80% p.a. payable annually. If the call option is not exercised at the end of 10 th year from the date of allotment then the bonds shall carry the interest of 9.30% payable annually for the last five years i.e. 11 th to 15 th year.	15 years	At par at the end of 10 th year from the date of allotment (with prior RBI permission)	None	At par at the end of the 15 th year from the date of allotment, if the call is not exercised at the end of 10 th year
VIII	04.06.2009	500	Interest will be paid at the rate of 8.37% p.a. payable annually. If the call option is not exercised at the end of 10 th year from the date of allotment then the bonds shall carry the interest of 8.87% payable annually for the last five years i.e. 11 th to 15 th year.	15 years	At par at the end of 10 th year from the date of allotment (with prior RBI permission).	None	At par at the end of the 15 th year from the date of allotment, if the call is not exercised at the end of 10 th year

IX	09.09.2009	500	Interest will be paid at the rate of 8.60% p.a. payable annually. If the call option is not exercised at the end of 10 th year from the date of allotment then the bonds shall carry the interest of 9.10% payable annually for the last five years i.e. 11 th to 15 th year.	15 years	At par at the end of 10 th year from the date of allotment (with prior RBI permission)	None	At par at the end of the 15 th year from the date of allotment, if the call is not exercised at the end of 10 th year
X	27.11.2009	500	Interest will be paid at the rate of 8.50% p.a. payable annually. If the call option is not exercised at the end of 10 th year from the date of allotment then the bonds shall carry the interest of 9.00% payable annually for the last five years i.e. 11 th to 15 th year.	15 years	At par at the end of 10 th year from the date of allotment (with prior RBI permission)	None	At par at the end of the 15 th year from the date of allotment, if the call is not exercised at the end of 10 th year
XI	24.05.2010	500	Interest will be paid at the rate of 8.50% p.a. payable annually. If the call option is not exercised at the end of 10 th year from the date of allotment then the bonds shall carry the interest of 9.00 % payable annually for the last five years i.e. 11 to 15 th year.	15 years	At par at the end of 10 th year from the date of allotment (with prior RBI permission)	NONE	At par at the end of the 15 th year from the date of allotment, if the call is not exercised at the end of 10 th year
TOTAL		6110.00					

* Subject to RBI guidelines

c. Unsecured Redeemable Non Convertible Subordinated Bonds in the nature of Promissory Notes /Debenture (Tier 2 Bonds)

Sr. No.	Series	Date of Allotment	Bond Amount (Rs in Crs)	Nature	Coupon Rate (% p.a. payable annually)	Tenor (in months)	Date of Maturity
1	XIV	24.02.2014	1000.00	Debenture	9.65	120	24.02.2024
2	XV	28.03.2014	500.00	Debenture	9.68	120	28.03.2024
3	XVI	03.04.2014	500.00	Debenture	9.68	120	03.04.2024
4	XVII	09.09.2014	500.00	Debenture	9.35	120	09.09.2024
5	XVIII	30.09.2014	1000.00	Debenture	9.25	120	30.09.2024
6	XIX	05.02.2016	1500.00	Debenture	8.65	120	05.02.2026
TOTAL			5000.00				

2.2. The Tier 1 capital of the bank comprises:

		(₹ in crore)	
Particulars		31.03.2017	31.03.2016
i)	Paid up share capital	425.59	392.72
ii)	Reserves (excluding revaluation reserves)	37208.18	34637.91
iii)	Innovative Perpetual Bonds	5770.50	3520.50
iv)	Other Capital Instruments	0.00	0.00
v)	Equity Investment in subsidiaries (50%)	654.50	920.60
vi)	Intangible Assets (Deferred Tax Assets + Computer Software)	6173.71	4711.39
vii)	Dep. for illiquid securities		0.00
Tier 1 Capital (i + ii + iii + iv –v –vi-vii)		36576.06	32919.14

2.3. The amount of Tier 2 capital (net of deductions) is:

		(₹.in crore)	
Particulars		31.03.2017	31.03.2016
The amount of Tier 2 capital (net of deductions)		17036.56	15837.24

2.4. The debt capital instruments eligible for inclusion in Upper Tier 2 capital are:

(₹ in Crores)

Particulars	31.03.2017	31.03.2016
Total amount outstanding	6110	6610.00
Of which amount raised during the current year	0	0.00
Amount eligible to be reckoned as capital funds	6110	6610.00

2.5. The subordinated debts eligible for inclusion in Lower Tier 2 capital is:

(₹ in crores)

Particulars	31.03.2017	31.03.2016
Total amount outstanding	5000	6499.80
Of which amount raised during the current year	0	1500.00
Amount eligible to be reckoned as capital funds	5000	5000.00

2.6. Other deductions from capital, if any:

(₹ in crores)

Particulars	31.03.2017	31.03.2016
Other deductions from capital, if any:	NIL	NIL

2.7. The total eligible capital comprises:

(₹. in crores)

Particulars	31.03.2017	31.03.2016
Tier . 1 Capital	36576.06	32919.14
Tier . 2 Capital	17036.56	15837.24
Total Capital	53612.62	48756.38

Table DF-3: Capital Adequacy

Qualitative Disclosures:

Capital Adequacy

The bank believes in the policy of total risk management. The bank views the risk management function as a holistic approach whereby risk retention is considered appropriate after giving due consideration to factors such as specific risk characteristics of obligor, inter relationship between risk variables and corresponding return and achievement of various business objectives within the controlled operational risk environment. Bank believes that risk management is one of the foremost responsibilities of top/ senior management. The Board of Directors decides the overall risk management policies and approves the Risk Management Philosophy & Policy, Credit Management & Risk policy, Investment policy, ALM policy, Operational Risk Management policy, Policy for internal capital adequacy assessment process (ICAAP), Credit Risk Mitigation & Collateral Management Policy, Stress Testing Policy and Policy for Mapping Business Lines/Activities, containing the direction and strategies for integrated management of the various risk exposures of the Bank. These policies, inter alia, contain various trigger levels, exposure levels, thrust areas etc.

The bank has constituted a Board level subcommittee namely Risk Management Committee (RMC). The committee has the overall responsibility of risk management functions and oversees the function of Credit Risk Management Committee (CRMC), Asset Liability Committee (ALCO) and Operational Risk Management Committee (ORMC). The meeting of RMC is held at least once in a quarter. The bank

recognizes that the management of risk is integral to the effective and efficient management of the organization.

3.1. Credit Risk Management

3.1.1 Credit Risk Management Committee (CRMC) headed by MD & CEO is the top-level functional committee for Credit risk. The committee considers and takes decisions necessary to manage and control credit risk within overall quantitative prudential limit set up by Board. The committee is entrusted with the job of approval of policies on standards for presentation of credit proposal, fine-tuning required in various models based on feedbacks or change in market scenario, approval of any other action necessary to comply with requirements set forth in Credit Risk Management Policy/ RBI guidelines or otherwise required for managing credit risk.

3.1.2 In order to provide a robust risk management structure, the Credit Management and Risk policy of the bank aims to provide a basic framework for implementation of sound credit risk management system in the bank. It deals with various areas of credit risk, goals to be achieved, current practices and future strategies. As such, the credit policy deals with short term implementation as well as long term approach to credit risk management. The policy of the bank embodies in itself the areas of risk identification, risk measurement, risk grading techniques, reporting and risk control systems / mitigation techniques, documentation practice and the system for management of problem loans.

All loan proposals falling under the powers of GM & above at HO/ Zonal Manager and Circle Head at field are considered by Credit Approval Committee (CAC).

3.1.3 Bank has developed comprehensive risk rating system that serves as a single point indicator of diverse risk factors of counterparty and for taking credit decisions in a consistent manner. The risk rating system is drawn up in a structured manner, incorporating different factors such as borrower's specific characteristics, industry specific characteristics etc. Risk rating system is being applied to the loan accounts with total limits above Rs.50 lac. Bank is undertaking periodic validation exercise of its rating models and also conducting migration and default rate analysis to test robustness of its rating models.

Small & Medium Enterprise (SME) and Retail advances are subjected to Scoring models which support "Accept/ Reject" decisions based on the scores obtained. All SME and Retail loan applications are necessarily to be evaluated under score card system. Scoring model Farm sector has been developed and implementation process is under progress. The bank plans to cover each borrowal accounts to be evaluated under risk rating/ score framework.

Recognizing the need of technology platform in data handling and analytics for risk management, the bank has placed rating/ scoring systems at central server network. All these models can be accessed by the users 'on line' through any office of the bank.

For monitoring the health of borrowal accounts at regular intervals, bank has put in place a tool called Preventive Monitoring System (PMS) for detection of early warning signals with a view to prevent/minimize the loan losses.

3.1.4 Bank is in the process of implementing enterprise-wide data warehouse (EDW) project, to cater to the requirement for the reliable and accurate historical data base and to implement the

sophisticated risk management solutions/ techniques and the tools for estimating risk components {PD (Probability of Default), LGD (loss Given Default), EAD (Exposure at Default)} and quantification of the risks in the individual exposures to assess risk contribution by individual accounts in total portfolio and identifying buckets of risk concentrations.

3.1.5 As an integral part of Risk Management System, bank has put in place a well-defined Loan Review Mechanism (LRM). This helps bring about qualitative improvements in credit administration. A separate Division known as Credit Audit & Review Division has been formed to ensure LRM implementation.

3.1.6 The risk rating and vetting process is done independent of credit appraisal function to ensure its integrity and independency. The rating category wise portfolio of loan assets is reviewed on quarterly basis to analyze mix of quality of assets etc.

3.1.7 Though the bank has implemented the Standardized Approach of credit risk, yet the bank shall continue its journey towards adopting Internal Rating Based Approaches (IRB). Bank has received approval from RBI for adoption of Foundation Internal Rating Based Approach (FIRB) on parallel run basis w.e.f. 31.03.2013. Further, bank has placed notice of intention to RBI for implementing Advanced Internal Rating Based (AIRB) approach for credit risk.

Major initiatives taken for implementation of IRB approach are as under:

- For corporate assets class, bank has estimated PD based upon model wise default rates viz. Large Corporate and Mid Corporate borrowers using Maximum likelihood estimator (MLE). For retail asset class, PD is computed for identified homogeneous pool by using exponential smoothing technique.
- LGD (Loss Given Default) values have been calculated by using workout method for Corporate Asset Class as well as for each homogenous pool of Retail Asset Class.
- Bank has also put in place a mechanism to arrive at the LGD rating grade apart from the default rating of a borrower. The securities eligible for LGD rating are identified facility wise and the total estimated loss percentage in the account is computed using supervisory LGD percentage prescribed for various types of collaterals and accordingly LGD rating grades are allotted.
- Effective Maturity for different facilities under Corporate Asset Class has also been calculated as per IRB guidelines.
- Mapping of internal grades with that of external rating agencies grades: Bank has mapped its internal rating grades with that of external rating agencies grades. This exercise will help in unexpected loss calculation and PD estimation.
- Benchmarking of Cumulative Default Rates: Benchmark values of cumulative default rates for internal rating grades have been calculated based on the published default data of external rating agencies. The benchmark values will be used for monitoring of cumulative default rates of internal rating grades and PD validation.

- Bank has adopted supervisory slotting criteria approach for calculation of capital under specialised lending (SL) exposure falling under corporate asset class.
- Bank has put in place a comprehensive "Credit Risk Mitigation & Collateral Management Policy", which ensures that requirements of FIRB approach are met on consistent basis.

3.2 Market Risk & Liquidity Risk

The investment policy covering various aspects of market risk attempts to assess and minimize risks inherent in treasury operations through various risk management tools. Broadly, it incorporates policy prescriptions for measuring, monitoring and managing systemic risk, credit risk, market risk, operational risk and liquidity risk in treasury operations.

3.2.1 Besides regulatory limits, the bank has put in place internal limits and ensures adherence thereof on continuous basis for managing market risk in trading book of the bank and its business operations. Bank has prescribed entry level barriers, exposure limits, stop loss limits, VaR limits, Duration limits and Risk Tolerance limit for trading book investments. Bank is keeping constant track on Migration of Credit Ratings of investment portfolio. Limits for exposures to Counterparties, Industry Segments and Countries are monitored. The risks under Forex operations are monitored and controlled through Stop Loss Limits, Overnight limit, Daylight limit, Aggregate Gap limit, Individual Gap limit, Value at Risk (VaR) limit, Inter-Bank dealing and investment limits etc.

3.2.2 For the Market Risk Management of the bank, Mid-Office with separate Desks for Treasury & Asset Liability Management (ALM) has been established.

3.2.3 Asset Liability Management Committee (ALCO) is primarily responsible for establishing the market risk management and asset liability management of the bank, procedures thereof, implementing risk management guidelines issued by regulator, best risk management practices followed globally and ensuring that internal parameters, procedures, practices/policies and risk management prudential limits are adhered to. ALCO is also entrusted with the job of Base rate / MCLR and pricing of advances & deposit products and suggesting revision of MCLR/Base Rate/ BPLR to Board.

3.2.4 The policies for hedging and/or mitigating risk and strategies & processes for monitoring the continuing effectiveness of hedges/ mitigants are discussed in ALCO and based on views taken by /mandates of ALCO, hedge deals are undertaken.

3.2.5 Liquidity risk of the bank is assessed through gap analysis for maturity mismatch based on residual maturity in different time buckets as well as various liquidity ratios and management of the same is done within the prudential limits fixed thereon. Advance techniques such as Stress testing, simulation, sensitivity analysis etc. are used on regular intervals to draw the contingency funding plan under different liquidity scenarios.

3.2.6 Besides stock and flow approach, bank is also monitoring liquidity through Liquidity Coverage Ratio (LCR) under Basel-III framework. Liquidity Coverage Ratio which promotes short-term resilience of banks to potential liquidity disruptions by ensuring that they have sufficient high quality liquid assets (HQLAs) to survive an acute stress scenario lasting for 30 days. The LCR requirement has

become binding on the banks from January 1, 2015 with the following minimum required level as per the time-line given below:

	Jan 1, 2015	Jan 1, 2016	Jan 1, 2017	Jan 1, 2018	Jan 1, 2019
Minimum LCR	60%	70%	80%	90%	100%

The LCR of the bank is at comfortable level as against the regulatory requirement of 80% as on 31.03.2017. The bank is managing LCR at 143.16% on consolidated level (on basis of simple averages daily observation over previous quarter).

3.3 Operational Risk:

The bank adopts three lines of defense for management of operational risk, the first line of defense represented by various HO Divisions which are **Control Units (CU)**, **Business Units (BU)** or **Support Units (SU)**; Second line of defense represented by independent **Corporate Operational Risk Management Function (CORF)** being **Operational Risk Management Department (ORMD)** to oversee Operational Risk Management, and the third lines of defense represented by **Inspection & Audit Division/ Management Audit Division (IAD/ MARD)** which is a challenge function to the first two lines of defense, **Operational Risk Management Committee (ORMC)** headed by MD & CEO with all the EDs and key divisional heads as members is the Executive level committee to oversee the entire operational risk management of the bank. All the operational risk aspects like analysis of historical internal loss data (including near miss events, attempted frauds & robberies, external loss events), etc. are placed to the ORMC on quarterly basis. **Risk Description Charts (RDCs)**, annual **Risk & Control Self Assessments (RCSAs)**, **Key Risk Indicators (KRIs)** and **Business Environment & Internal Control Factors (BEICFs)** are also used to ascertain the inherent and residual risks in various activities and functions of the bank and initiating necessary corrective actions with respect to management/mitigation of the operational risks.

Internal Control is an essential pre-requisite for an efficient and effective operational risk management. Bank has clearly laid down policies and procedures to ensure the integrity of its operations, appropriateness of operating systems and compliance with the management policies. The internal controls are supplemented by an effective audit function that independently evaluates the control systems within the organization.

3.4 The capital requirements for Credit risk are:

	(₹ in crores)	
	31.03.2017	31.03.2016
Portfolios subject to standardised approach	30308.50	29156.51
Securitization exposure	NIL	NIL

3.5 The capital requirements for Market risk (under standardized duration approach) are:

	(₹ in crores)	
Risk Category	31.03.2017	31.03.2016
i) Interest Rate Risk	2197.21	1669.69
ii) Foreign Exchange Risk (including Gold)	18.00	18.00
iii) Equity Risk	1352.15	1045.80
iv) Total capital charge for market risks under Standardized duration approach (i + ii + iii)	3567.36	2733.49

3.6. The capital requirement for Operational risk:

(₹. in crores)

Capital requirement for operational risk	31.03.2017	31.03.2016
i) Basic indicator approach	3070.85	3090.04
ii) The Standardised approach (if applicable)	2998.98	3023.20

3.7. The capital ratios of the bank, (solo & group) and subsidiaries are:

Punjab National Bank (Solo) (Basel-II)

	31.03.2017	31.03.2016
CRAR%	12.33	11.95
CRAR . Tier 1 capital (%)	8.41	8.07
CRAR . Tier 2 capital (%)	3.92	3.88

Punjab National Bank (Group) (Basel-II)

	31.03.2017	31.03.2016
CRAR%	12.39	13.66
CRAR . Tier 1 capital (%)	8.30	9.56
CRAR . Tier 2 capital (%)	4.09	4.10

Subsidiaries:

Name of subsidiary	CRAR – Tier 1 capital (%) (Basel II)		CRAR – Tier 2 capital (%) (Basel II)		Total capital ratio CRAR (%) (Basel II)	
	31.03.2017	31.03.2016	31.03.2017	31.03.2016	31.03.2017	31.03.2016
PNB Gilts Ltd	74.36	70.30	0.00	0.00	74.36	70.30
Punjab National Bank (International) Ltd.	17.76	12.28	5.06	5.00	22.82	17.28
PNB Investment Services Ltd.	NA	NA	NA	NA	NA	NA
Druk PNB Bank Ltd.	12.63	14.93	2.39	3.65	15.02	18.59
PNB Insurance Broking Pvt. Ltd.	NA	NA	NA	NA	NA	NA

Table DF-4: Credit Risk: General Disclosures

Qualitative Disclosures:

4.1 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. Further, an impaired asset is a loan or an advance where:

- (i) Interest and/or installment of principal remains overdue for a period of more than 90 days in respect of a term loan.
- (ii) The account remains out of order in respect of an overdraft/cash credit for a period of more than 90 days.

Account will be treated out of order, if:

- The outstanding balance remains continuously in excess of the limit/drawing power.

- In cases where the outstanding balance in the principal operating account is less than the sanctioned limit/drawing power, but 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.

(iii) In case of bills purchased & discounted, the bill remains overdue for a period of more than 90 days.

(iv) The installment or principal or interest thereon remains overdue for two crop seasons for short duration and the installment of principal or interest thereon remains overdue for one crop season for long duration crops in case of Agricultural loans.

Credit approving authority, prudential exposure limits, industry exposure limits, credit risk rating system, risk based pricing and loan review mechanisms are the tools used by the bank for credit risk management. All these tools have been defined in the Credit Management & Risk Policy of the bank. At the macro level, policy document is an embodiment of the Bank's approach to understand measure and manage the credit risk and aims at ensuring sustained growth of healthy loan portfolio while dispensing the credit and managing the risk. Credit risk is measured through sophisticated models, which are regularly tested for their predictive ability as per best practices.

4.2. The total gross credit risk exposures are:

Category	₹. in crores)	
	31.03.2017	31.03.2016
Fund Based	441751.36	432775.04
Non Fund Based	81774.27	78051.25

4.3 . The geographic distribution of exposures is:

Category	₹. in crores)			
	Overseas		Domestic	
	31.03.2017	31.03.2016	31.03.2017	31.03.2016
Fund Based	51209.93	53504.53	390541.43	379270.51
Non-fund based	172.48	4315.50	81601.79	73735.75

4.4 (a) Industry type distribution of exposures (Fund Based) is as under:

Industry Name

Industry Name	₹. in crores)	
	31.03.2017	31.03.2016
A. Mining and Quarrying (A.1 + A.2)		
A.1 Coal	500.14	531.21
A.2 Others	863.72	877.37
B. Food Processing (B.1 to B.4)		
B.1 Sugar	5540.61	6763.29
B.2 Edible Oils and Vanaspati	1006.83	863.69
B.3 Tea	3.96	4.15
B.4 Coffee	0.08	0.00

B.5 Others	4669.63	5669.68
C. Beverages & Tobacco		
C. 1. Tobacco and Tobacco Products	27.64	0.00
C.2 Others	739.69	934.00
D. Textiles		
D.1 Cotton	3945.25	3881.46
D.2 Jute	142.46	137.30
D.3 Man Made	1283.01	0.00
D.4 Others	6406.66	7797.12
E. Leather and Leather products	888.13	961.49
F. Wood and Wood Products	393.83	324.16
G. Paper and Paper Products	1403.91	1503.22
H. Petroleum (non-infra), Coal Products (non-mining) and Nuclear Fuels	1416.04	1968.16
I. Chemicals and Chemical Products (Dyes, Paints, etc.) (I.1 to I.4)		
I.1 Fertilizers	464.37	491.20
I.2 Drugs and Pharmaceuticals	1753.46	2508.62
I.3 Petro-chemicals (excluding under Infrastructure)	3777.97	628.94
I.4 Others	2104.75	3293.86
J. Rubber, Plastic and their Products	1279.82	1260.07
K. Glass & Glassware	135.31	112.15
L. Cement and Cement Products	2322.24	2282.94
M. Basic Metal and Metal Products (M.1 + M.2)		
M.1 Iron and Steel	25032.88	26655.15
M.2 Other Metal and Metal Products	2156.16	2196.33
N. All Engineering (N.1 + N.2)		
N.1 Electronics	1034.01	1177.45
N.2 Others	3465.39	3571.51
O. Vehicles, Vehicle Parts and Transport Equipments	747.88	864.93
P. Gems and Jewellery	2360.22	2844.89
Q. Construction	3637.91	3605.74
R. Infrastructure (a to d)		
a. Energy	30148.38	30555.17
b. Transport	12798.85	8369.76
c. Communication	4349.61	3730.55
d. Other infrastructure	5579.95	5904.87
S. Other Industries	14581.08	15940.64
All Industries (A to S) (Total)	146961.83	148211.08
T. Residuary advances	294789.53	284563.96
Total Loans and Advances	441751.36	432775.04

Industry where fund- based exposure is more than 5% of gross fund based exposure:

Industry Name	Amount – 31.03.2017	Amount – 31.03.2016
Basic Metal and Metal Products	27189.04	28851.48
Infrastructure	52876.78	48560.36

4.4 (b) - Industry type distribution of exposures (Non Fund Based) is as under:

Industry Name

(₹. in crores)

	31.03.2017	31.03.2016
A. Mining and Quarrying (A.1 + A.2)		
A.1 Coal	52.45	87.31
A.2 Others	35.62	49.85
B. Food Processing (B.1 to B.4)		
B.1 Sugar	949.32	1046.73
B.2 Edible Oils and Vanaspati	1159.25	1105.49
B.3 Tea	0.00	0.46
B.4 Coffee	0.00	
B.5 Others	391.52	402.47
C. Beverages & Tobacco		
C. 1. Tobacco and Tobacco Products	3.09	
C.2 Others	109.73	171.80
D. Textiles		
D.1 Cotton	195.89	255.11
D.2 Jute	36.17	47.99
D.3 Man Made	119.90	
D.4 Others	1030.94	866.37
E. Leather and Leather products	78.31	78.32
F. Wood and Wood Products	57.51	120.77
G. Paper and Paper Products	306.58	308.24
H. Petroleum (non-infra), Coal Products (non-mining) and Nuclear Fuels	1829.22	1376.51
I. Chemicals and Chemical Products (Dyes, Paints, etc.) (I.1 to I.4)		
I.1 Fertilizers	11.42	10.15
I.2 Drugs and Pharmaceuticals	436.57	413.73
I.3 Petro-chemicals (excluding under Infrastructure)	404.65	417.74
I.4 Others	426.89	421.44
J. Rubber, Plastic and their Products	231.15	297.01
K. Glass & Glassware	12.42	11.14
L. Cement and Cement Products	238.83	182.87

M. Basic Metal and Metal Products (M.1 + M.2)		
M.1 Iron and Steel	9626.99	8222.90
M.2 Other Metal and Metal Products	746.25	475.71
N. All Engineering (N.1 + N.2)		
N.1 Electronics	1884.56	1779.02
N.2 Others	5577.30	5179.53
O. Vehicles, Vehicle Parts and Transport Equipments	387.64	117.01
P. Gems and Jewellery	430.21	432.77
Q. Construction	3169.80	2752.12
R. Infrastructure (a to d)		
a. Energy	7702.13	7463.19
b. Transport	2065.13	1886.12
c. Communication	1553.68	911.15
d. Other infrastructure	1962.55	1901.21
S. Other Industries	6888.73	7894.05
All Industries (A to S) (Total)	50112.40	46686.30
T. Residuary advances	31661.87	31364.95
Total Loans and Advances	81774.27	78051.25

Industry where non-fund based exposure is more than 5% of gross non-fund based exposure:

Industry Name	Amount – 31.03.2017	Amount – 31.03.2016
Basic Metal and Metal Products	10373.24	8698.61
Infrastructure	13283.49	12161.67
All Engineering	7461.86	6958.55

4.5 . The residual contractual maturity break down of assets is:

(₹ in crores)

Maturity Pattern	Advances*	Investments (gross)	Foreign Currency Assets*
Next day	10899.88	0.00	2048.11
	(9444.69)	(0.63)	(4280.08)
2 days-7days	9035.95	0.00	2365.13
	(9303.56)	(1213.89)	(2845.08)
8-14 days	5928.24	99.99	1811.49
	(6683.39)	(552.82)	(7520.57)
15-30 days	15988.52	746.60	6774.67
	(9226.02)	(1487.19)	(6284.93)
31 days to 2 months	6562.41	879.32	13169.13
	(50079.63)#	(3711.01)#	(17372.55)#
Over 2 months & upto 3 months	11618.37	4021.48	11571.29
	#	#	#

Over 3 Months to 6 months	8651.13	4108.48	19942.88
	(28361.20)	(3128.55)	(12314.55)
Over 6 Months & upto 1 year	32215.26	4332.76	18117.09
	(32667.44)	(3815.42)	(19631.32)
Over 1Year & upto 3 Years	210659.85	26255.47	3785.31
	(189721.13)	(22221.51)	(4412.47)
Over 3 Years & upto 5 Years	38439.68	21742.06	4045.58
	(28443.96)	(21657.39)	(2865.81)
Over 5 Years	69493.86	125951.89	1662.32
	(48394.78)	(101018.11)	(363.46)
Total	419493.15	188138.05	85293.00
	(412325.80)	(158806.53)	(77890.82)

*Figures are shown on net basis. (Figures in brackets relate to previous year)

#This bucket has been included afresh and in previous the figures of this bucket were included under bucket under 28 days to 3 months.

4.6. The gross NPAs are:

(₹in crores)		
Category	31.03.2017	31.03.2016
Sub Standard	15390.08	25546.99
Doubtful . 1	19086.91	16844.79
Doubtful . 2	18189.20	10751.83
Doubtful . 3	1267.26	803.97
Loss	1437.00	1870.75
Total NPAs (Gross)	55370.45	55818.33

4.7. The amount of net NPAs is:

(₹in crores)		
Particulars	31.03.2017	31.03.2016
Net NPA	32702.10	35422.57

4.8. The NPA ratios are as under:

NPA Ratios	31.03.2017	31.03.2016
% of Gross NPAs to Gross Advances	12.53	12.90
% of Net NPAs to Net Advances	7.81	8.61

4.9. The movement of gross NPAs is as under:

(₹in crores)		
Movement of gross NPAs	31.03.2017	31.03.2016
i) Opening Balance at the beginning of the year	55818.33	25694.86
ii) Addition during the year	22414.59	42251.80
iii) Reduction during the year	22862.47	12128.33
iv) Closing Balance as at the end of the year (i + ii - iii)	55370.45	55818.33

4.9.1 The movement of provision for NPAs is as under:

(₹ in crores)

Movement of provision for NPAs	31.03.2017	31.03.2016
i) Opening Balance at the beginning of the year	19854.43	9801.75
ii) Provisions made during the year	15881.23	18145.20
iii) Write-off made during the year	9205.12	5412.05
iv) Write . back of excess provisions made during the year	4487.05	2680.47
v) Closing Balance as at the end of the year (i + ii - iii-iv)	22043.49	19854.43

4.10. The amount of non-performing investment is:

(₹ in crores)

Particulars	31.03.2017	31.03.2016
Amount of non-performing investment	727.90	516.41

4.11. The amount of provisions held for non-performing investment is:

(₹ in crores)

Particulars	31.03.2017	31.03.2016
Amount of provision held for non-performing investment	591.23	267.00

4.12. The movement of provisions for depreciation on investments is as under:

(₹ in crores)

Movement of provisions for depreciation on investments	31.03.2017	31.03.2016
i) Opening balance at the beginning of the year	960.64	603.44
ii) Provisions made during the year	704.68	762.21
iii) Write-off made during the year	0.00	0.00
iv) Write-back of excess provisions made during the year (Net)	252.71	405.01
v) Closing balance as at the end of the year (i + ii -iii-iv)	1412.61	960.64

Table DF-5 - Credit Risk: Disclosures for Portfolios Subject to the Standardized Approach

Qualitative Disclosures:

5.1. Bank has approved the following six domestic credit rating agencies accredited by RBI for mapping its exposure with domestic borrowers under standardized approach of credit risk.

- Brickwork
- CARE
- CRISIL
- ICRA
- India Ratings
- SMERA

Bank has also approved the following three international credit rating agencies accredited by RBI in respect of exposure with overseas borrowers.

- FITCH
- Moody's
- Standard & Poor

These agencies are being used for rating (Long Term & Short Term) of fund based/ non fund based facilities provided by the bank to the borrowers. The bank uses solicited rating from the chosen credit rating agencies.

The ratings available in public domain are mapped according to mapping process as envisaged in RBI guidelines on the subject.

5.2. The exposure amounts after risk mitigation (subject to the standardized approach), amount of a bank's outstanding (rated and unrated) in the following three major risk buckets as well as those that are deducted; are as under:

	(₹ in crores)	
Particulars	31.03.2017	31.03.2016
i) Below 100% risk weight exposure outstanding	318850.57	279454.36
ii) 100% risk weight exposure outstanding	128123.14	151461.17
iii) More than 100% risk weight exposure outstanding	82887.93	73859.86
iv) Deducted	NIL	NIL

Table DF-6: Credit Risk Mitigation: Disclosures for Standardized Approaches

Qualitative Disclosures:

6.1. Bank has put in place Board approved 'Credit Risk Mitigation and Collateral Management Policy' which, inter alia, covers policies and processes for various collaterals including financial collaterals and netting of on and off balance sheet exposure. However, the bank is not making use of the on-balance sheet netting in its capital calculation process.

6.2. The collaterals used by the Bank as risk mitigant comprise of the financial collaterals (i.e. bank deposits, govt./postal securities, life policies, gold jewellery, units of mutual funds etc.). A detailed process of calculation of correct valuation and application of haircut thereon has been put in place by developing suitable software.

6.3. Guarantees, which are direct, explicit, irrevocable and unconditional, are taken into consideration by Bank for calculating capital requirement. Use of such guarantees for capital calculation purposes is strictly as per RBI guidelines on the subject.

6.4. Majority of financial collaterals held by the Bank are by way of own deposits and government securities, which do not have any issue in realization. As such, there is no risk concentration on account of nature of collaterals.

6.5. The total exposure for disclosed credit risk portfolio (under the standardized approach) is covered by:

	(₹ in crores)	
	31.03.2017	31.03.2016
a) For each separately disclosed credit risk portfolio, the total exposure (after, where applicable, on or off balance sheet netting) that is covered by eligible financial collateral after the application of haircuts.	21134.13	24263.28
b) For each separately disclosed, the total exposure (after, where applicable, on or off balance sheet netting) that is covered by guarantees/credit derivatives (wherever specifically permitted by RBI)	15966.53	22039.53

DF-7. Securitization: Standardized Approach

Bank does not have any securitization exposure.

DF-8: Market Risk in Trading Book

8.1. RBI prescribed Standardized Measurement Method (duration based) for computation of capital charge for market risk has been adopted by Bank. Being fully compliant with Standardized Measurement Method as per RBI guidelines, now Bank is preparing for the Internal Model Approach (Advanced Approach on Market risk) based on Value at Risk (VaR) model, which is under implementation.

8.2. The capital requirements for market risk are as under:

	(₹ in crores)	
Risk Category	31.03.2017	31.03.2016
i) Interest Rate Risk	2197.21	1669.69
ii) Equity Risk	1352.15	1045.80
iii) Foreign Exchange Risk (including Gold)	18.00	18.00
iv) Total capital charge for market risks under Standardised duration approach (i+ii+iii)	3567.36	2733.49

DF-9. Operational Risk

As per RBI directives, the bank has been maintaining capital for operational risk under Basic Indicator approach (BIA) w.e.f. 31.03.2008. The capital requirement as per **Basic Indicator Approach (BIA)** is **Rs. 3070.85** crores as on 31.03.2017.

Bank had applied to RBI for migration to the next advanced approach viz. "**The Standardized Approach (TSA)**" and RBI had permitted parallel run of TSA on **30.11.2011** advising bank to continue to maintain capital charge under BIA till such time final permission is granted by them for TSA. The capital requirement as per **TSA** is **Rs. 2998.98** Crores as on 31.03.2017. Bank had also applied to RBI for migration to the next advanced approach viz. "**Advanced Measurement Approach (AMA)**" and RBI had also permitted parallel run of AMA on **03.09.2015** advising bank to continue to maintain capital charge under **BIA** till such time final permission is granted by them for AMA.

Table DF-10: Interest Rate Risk in the Banking Book (IRRBB)

Qualitative Disclosures:

Interest Rate Risk in the Banking Book (IRRBB)

10.1 The interest rate risk arises due to fluctuating interest rates on rate sensitive assets and liabilities. For earning perspective, Traditional Gap Analysis (TGA) and for economic value perspective, Duration Gap Analysis (DGA) is carried out to assess the interest rate risk at quarterly intervals on both trading book and banking book for domestic and overseas operations, as per RBI guidelines. As per ALM Policy, prudential limits have been fixed for impact on Net Interest Income (NII), Net Interest Margin (NIM), Duration gap and Market Value of Equity for the bank. Moreover, behavioral studies are also being done for assessing and apportioning volatile and core portion of various non-maturity products of both assets and liabilities.

Earning Approach

Since, in case of banks, interest income comprises major part of the income, a standardized rate shock analysis for upward or downward rate movement on the Gap statement is done. Accordingly, Earning at Risk (EaR) for different rate shocks is done to assess the impact on Net Interest Income (NII) of the bank due to adverse movement of rate of interest.

Earning at Risk: The table reveals the impact of 0.50% adverse change in interest rate on NII as at 31.03.2017

Change in interest rate	Estimated impact on NII due to adverse change in rate of interest up to 1 year
50 bps	Rs. 496.42 cr.

Economic Value of Equity: The table reveals the impact on Economic Value of Equity for an assumed rate shock of 200 bps on the banking book as at 31.03.2017.

Change in Economic value of Equity	200 bps
	Rs. 2166.94 cr.

10.2 Economic Value Approach

The economic value approach involves analyzing the impact on the capital funds due to change in interest rate by 200 bps using Duration gap Approach. It assesses the intrinsic values of assets and liabilities from time to time thereby improving banks insight into the profile of assets and liabilities vis-a vis contractual rate and market rate. As a prudential measure, a limit has been fixed for net duration gap of the assets and liabilities and the same is monitored at regular interval.
