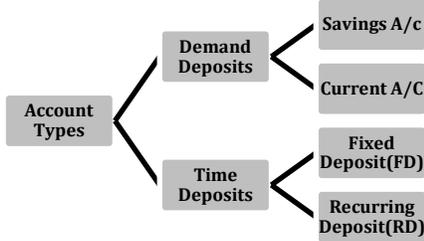




# BANK FUNCTIONS AND RISK ASSESSMENT

## Basic functions of bank in detail-

Deposits → Types of deposit accounts



### Saving Account –

1. opened to encourage the people to save money and get interest on their deposited.
2. Restrictions on max number of withdrawals in a period and the maximum amount of withdrawal
3. Earlier interest rate was 4% & decided by RBI,
4. but now RBI has deregulated interest rates and now banks are free to decide

### Current Account

1. meant for businessmen (day to day transaction) and are never used for the purpose of investment or savings.
2. most liquid deposits and there are no limits for number of transactions
3. No interest is paid by the bank
4. The main benefit of this account overdraft facility.

### Fixed/Term/Time deposit Account –

1. Maturity periods from 7 days to 10 years
2. cannot be withdrawn before maturity.
3. depositor can ask for closing (or breaking) the fixed deposit prematurely by paying a penalty (usually of 1%) rate of interest for Fixed Deposits differs from bank to bank

### Recurring Deposit Account

1. Special kind of Term Deposits and are suitable for people who do not have lump sum amount of savings, but are ready to save a small amount every month/ 6 months/1 year/3 year or etc.
2. This amount cannot be withdrawn before the maturity date.
3. Interest is compounded on quarterly basis

Apart from that banks also maintains deposit a/c for NRIs, Indian working abroad

## Deposits account of NRI/NRO

Transfer funds freely between India and abroad			
Type of accounts	NRE non resident external	NRO non resident ordinary	FCNR Foreign Currency Non Resident
Purpose	To park your overseas earnings remitted to India	To park India based current income in	Deposit is denominated in foreign

	and converted to Indian Rupees	Rupees in India	currency
Currency	RS.	RS.	USD, JPY, EURO
a/c types	Savings a/c Current A/c FD, RD	Savings a/c Current A/c FD, RD	FD
Tax	Exempted	Tax	Exempted

### Some points related to Interest Rates on deposits in Bank Accounts

1. Interest on Savings A/c is calculated on daily balance basis.
2. Now, All Scheduled Commercial Banks (Excluding RRBs) have the discretion to offer differential interest rates
3. All term deposits of individuals (held singly or jointly) of  15 lakh and below should, necessarily, have premature withdrawal facility.
4. Banks should disclose in advance the schedule of interest rates payable on deposits

## Lending activity by banks

After deposits lending is second major function of banks. Before discussing types of lending, let us first discuss Principles of Sound Lending

### Principles of Sound Lending

**Secured Advances** - A secured advance is made on the security of either assets or against personal security or other guarantees.

**Margins Money** – There should be sufficient margin between the amount of loan and value of the security.

**Liquidity** – because banks lend public money which is generally deposited for short terms and can be withdrawn at any time by depositors.

1. lend for short periods only
2. advance loans on the security of such assets which can be easily converted into cash at a short notice

**Safety** - for safety bank should examine the nature of security, the character of the borrower, his capacity to repay and his financial standing

### Diversity –

1. **Don't invest all funds in a single security**
2. It should spread its risks by giving loans to various borrowers and industries in different parts of the country.

**Stability**--bank should invest its funds in those **stocks** and securities the prices of which are more or less stable



**Profitability** -there is no point in keeping all the assets in the form of cash on hand. Rather bank should use money markets to park short term funds i.e. at call and short notice, bills discounted, etc.

r  
**Types of securities against lending**

Every bank while giving loans/credits always demand some kind of security in form physical assets or otherwise, so that it can recover its money in case of default or non-payment of loan amount.

Types of Securities	
<b>Tangible Securities</b>	land, buildings and machinery
<b>Personal Securities</b>	promissory notes, bills or exchange, a security bond are the personal liability of guarantor
<b>Intangible securities</b>	
<b>Primary Securities</b>	<u>created with the help of finance made by bank</u> — machinery bought with bank loan
<b>Collateral Security</b>	<u>additional security</u> given by the borrower where the <u>primary security is not enough</u> to recover the loan e.g. the land of the factory along with machinery

Lending ---loan account types			
Compare	Cash Credit Facility	Term loan	Overdraft
<b>Meaning</b>	a type of <u>short term loan</u> to companies to fulfil their <u>working capital</u> requirement.	<u>Long term loans</u> & repayment is done in fixed, <u>pre-determined EMI's</u> , required to purchase fixed assets like plant, machinery	a facility to <u>withdraw money "more" than the balance</u> available in the accounts.
<b>Security</b>	inventory	Assets property etc	Assets like property
<b>Account</b>	Cash Credit Account like counterpart of current a/c	Loan account and imagine as counter part of fixed deposits.	Current Account

Finally we will discuss how a bank determine at what interest rate to forward loans/credits

**PLR - The Prime lending Rate**

1. **interest rate charged by banks to their most creditworthy customers** (usually the most prominent and stable business customers).
2. It is also called BPLR. BPLR has been scrapped after july, 2010.

3. Now banks are free to decide their prime lending rates as per formula mandated by RBI . It is based on the average cost of funds .
4. Starting 1 April 2016, lenders will calculate their lending rates based on the marginal cost of funds, or the rate offered on new deposits. The new rules will likely to make loans cheaper for new borrowers.

**Chapter 11 Risk management in banks**

**What is risk ?**

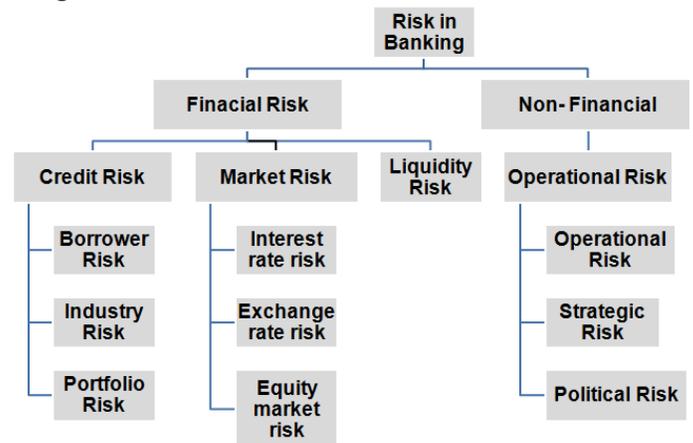
Bank primarily accepts deposits from public & advance loans/credits. Repayment of loans cannot always be guaranteed. There may be non-payment or defaults on loans. So risk involves in very basic function of banks i.e. lending activity.

More technically, deposit side of banks is known as liability of banks while lending/loans are assets of a bank, as banks always earn via interest rates on loans. So loan advances & credits are assets for a bank.

If due to any reason there is imbalance on two sides (liability - assets), it may lead to various kinds of risks.

**Types of risks**

Depending upon various basis risk in banking can be categorise as shown below



**Credit risk**

A **credit risk** is the risk of default finance on a debt that may arise from a borrower failing to make required payments

Credit default risk — The risk of loss arising from a debtor being failed to pay its loan obligations. Vijaya Mallya!

**Portfolio risk (Concentration risk)** — The risk associated with any single exposure or group of exposures. If a bank advances majority of its loans to single business group & if due to any reason this business group defaults. Such risks are known as concentration risks. It arise due to failure of bank to diversify its landings.

**Industry risk**

Slowdown in any particular industry may lead to risk if a bank heavily advances to this industry.

**Country risk** — The risk of loss arising from a sovereign state with the country's macroeconomic performance and its political stability.

How to mitigate

**Risk-based pricing** — Lenders may charge a higher interest rate to borrowers who are more likely to default, a practice called RISK BASED PRICING

**Covenants** — Lenders may write stipulations on the borrower, called loan covenant into loan agreements, such as

Periodically report its financial condition,

Refrain from paying dividends, repurchasing shares, borrowing further, or other specific, voluntary actions

**Diversification** —the borrower pool.

**Deposit insurance** — Governments may establish **deposit insurance** to guarantee bank deposits in the event of insolvency and to encourage consumers to hold their savings in the banking system instead of in cash.

## Market Risk

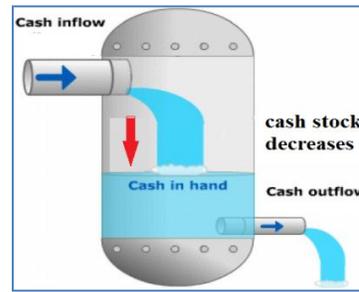
Banks directly invests or have exposures to various types of markets, like commodity markets, equity markets, money markets, currency markets etc Prices in these markets may fluctuate ex oil market almost crashes in last 2-3 years! such adverse movements in market prices may expose banks to risks.

**Types of market risks**

- 1) Interest Rate Risk
- 2) Equity market risk
- 3) Exchange rate risk
- 4) Commodity price risk

## Liquidity Risk –

1. bank unable to meet short term **financial** demands.
2. It may caused due to inability to convert a security or hard asset to cash.
3. Asset liability Mismatch



**Operational Risk-** arises as a result of failure of operating system in the bank --like fraudulent activities, natural disaster, human error, omission or sabotage etc

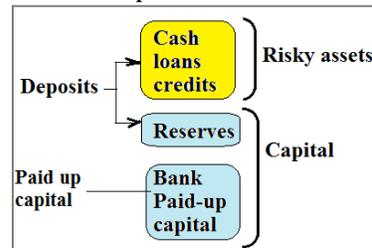
**Systemic Risk-** failure of one financial institution spreads as chain reaction to financial system as a whole.

**Reputation Risk-** potential loss that negative publicity regarding an institution's business practices, will cause a decline in the customer base, costly litigation, or revenue reduction

## Risk management in banks

How a bank manages risk! To understand risk management in banks we have to understand two terms. See image below

1. Risky assets
2. Capital



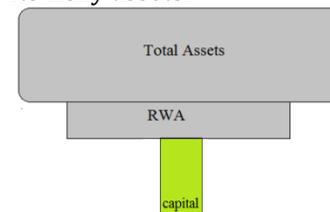
**Banks has two sources of money or capital.**

**First paid up capital** - its receives as a company from its shareholders

**Second** it accepts via deposits from public.

So part of this total money a bank advances in form of loans (risky assets). So if there is a default on these loans, capacity of a bank to absorb these defaults depends upon reserves it kept aside + its paid up capital.

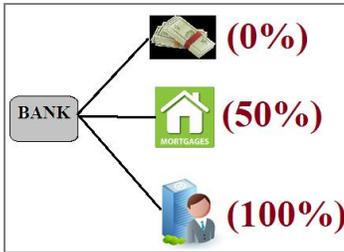
In conclusion, how much capital a bank have to absorb its risky assets.



## Risk weighted assets (RWA)

Next question is how to calculate size of risky assets.

All loans have not associated with same level of risks. Some loans are more riskier than others. So depending upon level of risk, banks assign different weights to different types of loans. See image  
 Cash in reserves = 0% risk  
 Housing loans = 50% risk  
 Loans to businesses = 100% risk

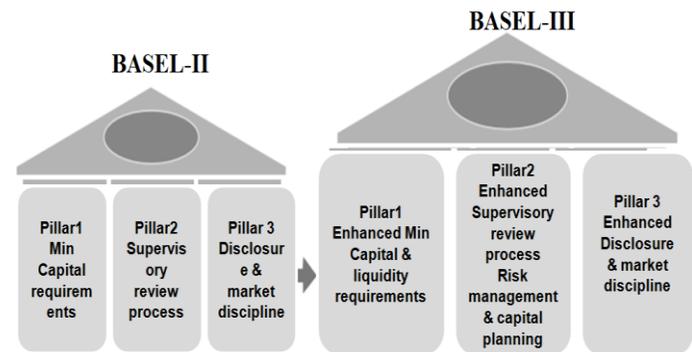


Basel 1	Basel 2	Basel 3
<b>Risk covers</b> Credit Risk Market Risk	Credit Risk, Market Risk Operational Risk	Credit Risk Market Risk Operational Risk Liquidity Risk Counter Cycle Risk
<b>1988</b>	<b>2004</b>	<b>2010</b>
<b>Tools</b> (CRAR)	1.CRAR 2.Supervisory Review 3.Market Discipline	1.CRAR 2.Supervisory Review 3.Market Discipline 4.Liquidity Coverage Ratio 5.Counter cycle Buffer 6.Capital Conservation Buffer 7.Leverage Ratio

**Technically, Risk-weighted asset** (also referred to as RWA) is a bank's **assets** or off-balance-sheet exposures, **weighted** according to **risk**. This sort of **asset** calculation is used in determining the capital requirement or Capital Adequacy Ratio (CAR) for a financial institution

### Three pillars

Three pillars of basel norms remained same but wider in scope. See image below



### Type of capital

Similarly we can also categorise **capital based on its ability to absorb risk. Some capital (money) is more readily available (liquid) & more risk absorbing than other.**

Capital includes Tier 1 (core) capital and Tier 2 (additional or supporting) capitals. Tier 1 capital is more stable and risk absorbing

Tier-I Capital- Paid up capital - SLR-Disclosed free reserves

Tier-II Capital--Undisclosed Reserves and Cumulative Perpetual Preference Shares

### Basel 3 in detail

Basel 3 measures aim to:

Improve the banking sector's ability to absorb shocks arising from financial and economic stress, whatever the source

Improve risk management and governance

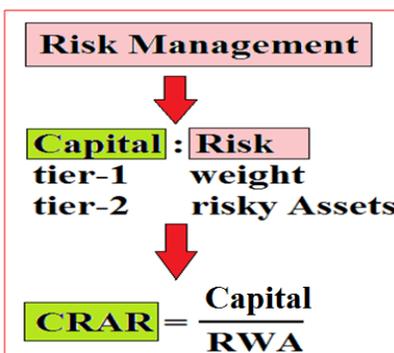
Strengthen banks' transparency and disclosures.

#### Capital requirements for Basel III - Pillar 1

Quality & quantity of capital -Greater focus on common equity. The minimum will be raised to 4.5% of RWA.

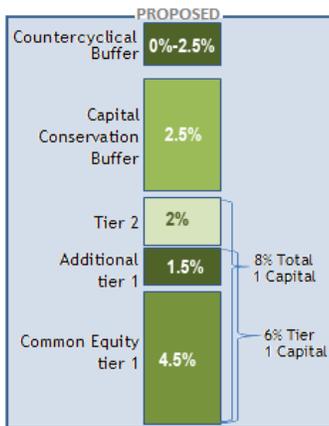
Capital conservation buffer

Countercyclical buffer



### Basel norms

a) The Basel Committee is the primary global standard-setter for the prudential regulation of banks and provides a forum for cooperation on banking supervisory matters. Its mandate is to strengthen the regulation, supervision and practices of banks worldwide with the purpose of enhancing financial stability..

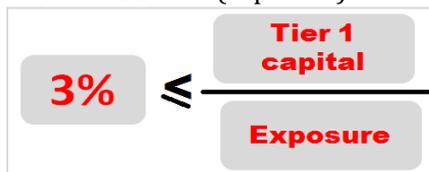


"Special Mention Account" (SMA)		&100%
	Loss	SS+3years >3 years 100%

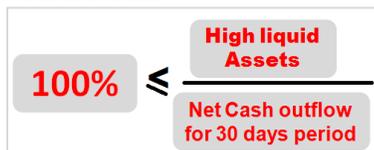
<b>NPA If customers don't pay either interest or part of principal or both</b>	<b>Loans</b>	<b>NPA overdue for a period of more than 90 days from the end of a particular quarter</b>
	<b>Agriculture Loans</b>	<b>Short</b> duration crops → not paid for 2 crop seasons <b>Long</b> duration crops → not paid for 1 crop seasons

### Terms related with BASEL III

**Leverage ratio**--This ratio will put a constraint on the leverage in the banking sector. It is based on gross exposure of bank. 3%. Means if a banks has 3 cr as tier 1 capital it can not advance loans/credits more than 100 cr.(exposure)



**Liquidity coverage ratio** --The LCR assumes an acute short-term, thirty day stress scene of a bank. A bank must have enough cash so that it can fulfil 30 days cash outflow from bank in form of loans or withdrawals.



**Systemically Important Financial Institutions (SIFI)** : expected to have loss-absorbing capability beyond the Basel III requirements.

1. **Asset classification**
2. **Provisioning Coverage Ratio(PCR)** refers to the funds to be set aside by the banks as fraction to the loans. to cover up losses if something goes wrong with those loans

Assets			
Classification	Time		Provisioning %
Standard assets			0.40% for all loans and advances
Performing assets			
NPA Non performing assets	<b>Sub-standard</b>	NPA + ≤ 12 months	15% secured 25 unsecured
	<b>Doubtful</b>	SS+12 months	Upto 1 year 25% & 100%
No payment for 90 days after ending quarter			1-3 years 40%

### Causes of NPA

1. **Speculation**: Investing in high risk assets to earn high income.
2. **Default** : Wilful defaulters
3. **Fraudulent practices**: advancing loans to ineligible persons or without security or guarantors etc.
4. **Diversion of funds**: for unnecessary expansion and diversion of business.
5. **Internal reasons**: inefficient management, inappropriate technology, labour problems, resulting in poor performance of the companies.
6. **External reasons** : recession in the economy, infrastructural problems, price rise, delay in release of sanctioned limits by banks, delays in settlements of payments by government, natural calamities, etc.

### Recovery of NPAs

1. Borrowers failed to repay loan → Bank declares that loan (NPA). Currently Indian banks have NPAs worth more than Rs. 1 lakh cores.
2. Prior to 1990s, banks had very hard time recovering bad loans. Because often, borrowers file faulty cases in civil courts (Long delay). So 1993, Government established **Debt Recovery Tribunals** to deal with NPA matters → 60,000 cases pending with DRTs
3. In 2002, Government came up with new Act, named **"SARFAESI Act"**.

### SARFAESI Act

The Securitization and Reconstruction of Financial Assets and Enforcement of Security Interest

1. banks can take legal route to recover their dues.
2. to issue notice to the borrower giving him 60 days to pay his dues
3. bank can take possession or lease out without requiring court order. → Auction / sale → Change the administration/ Management of those assets.

The borrower (loan taker) has following options:

1. Get a stay order from (DRT) against the auction/sale of his properties or Fight the case in DRT.
2. If unhappy with DRT verdict, he can appeal to Debt Recovery Appellate Tribunal (DRAT).

### Asset reconstruction company (ARC)

They buy NPA (Bad loans) from Banks and try to extract maximum money out of it.

