Valuation Examination: IBBI

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Syllabus of Valuation Examination

Macroeconomics

- National income accounting: consumption, capital, intermediate and final goods, stock and flows concepts, gross investment, depreciation and net investment; income method; expenditure method; value added method; GDP and NDP at factor cost and market price; national disposal income (gross and net); nominal and real income, GDP deflator
- Basics of fiscal policy: meaning, objectives and components; revenue receipts, capital receipts, revenue expenditure, capital expenditure, government deficit, revenue deficit, effective revenue deficit, fiscal deficit, primary deficit
- Basics of monetary policy: meaning, objectives and components; credit creation; money multiplier; tools of monetary policy- open market operation, cash reserve ratio, statutory liquidity ratio, bank rate, liquidity adjustment facility, marginal standing facility, reverse repo rate, quantitative easing; fiscal responsibility and budget management
- Understanding business cycles: business cycle; phases of business cycle; yield curve as a predictor of future economic growth; real business cycle

Macroeconomics

Gross National Product vs. Gross Domestic Product

- Gross **National** Product (GNP):
  It measures the value of goods and services produced by only a country's citizens but both domestically and abroad.

- Gross **Domestic** Product (GDP):
  It measures the value of goods and services produced within a country's borders regardless of the nationality.

GDP is the most commonly used by global economies

GNP – GDP = factor payments from abroad minus factor payments to abroad

Examples of factor payments: wages, profits, rent, interest & dividends on assets

Gross Domestic Product

Gross domestic product (GDP) is the total monetary or market value of all the finished goods and services produced within a country in a specific time period.
GDP is most often used to measure the economic growth, purchasing power, and overall economic health of a nation.

Nominal GDP is a macroeconomic assessment of the value of goods and services using current prices in its measure. Calculated by multiplying the current quantities at current year prices.

Real GDP takes nominal GDP and adjusts for inflation or deflation by comparing and converting prices to a base year's prices. The present base year for gross domestic product is **2011-12.**

Net National Product (NNP)

NNP = GNP – Depreciation

The deduction is done because a part of current produce goes to replace the depreciated parts of the products already produce which doesn't add value to current year's total produce.

Net Domestic Product (NDP)

NDP = GDP - Depreciation

GDP at Factor Cost & Market Price

Input cost the producer has to incur in the process of production is factor cost. (cost of capital, interest, rent, wages, raw materials).
When factor cost is considered to calculate GDP then it is **GDP at factor cost.**

Market cost derived after adding **indirect taxes** to **the** factor cost of production .it means d cost at which d goods entered in market.

GDP (MP) = GDP (FC) + Indirect Taxes minus subsidies

GDP Deflator

It is the ratio of the value of goods and services an economy produces in a particular year at current prices to that of prices that prevailed during the base year**.** It is a measure of inflation.

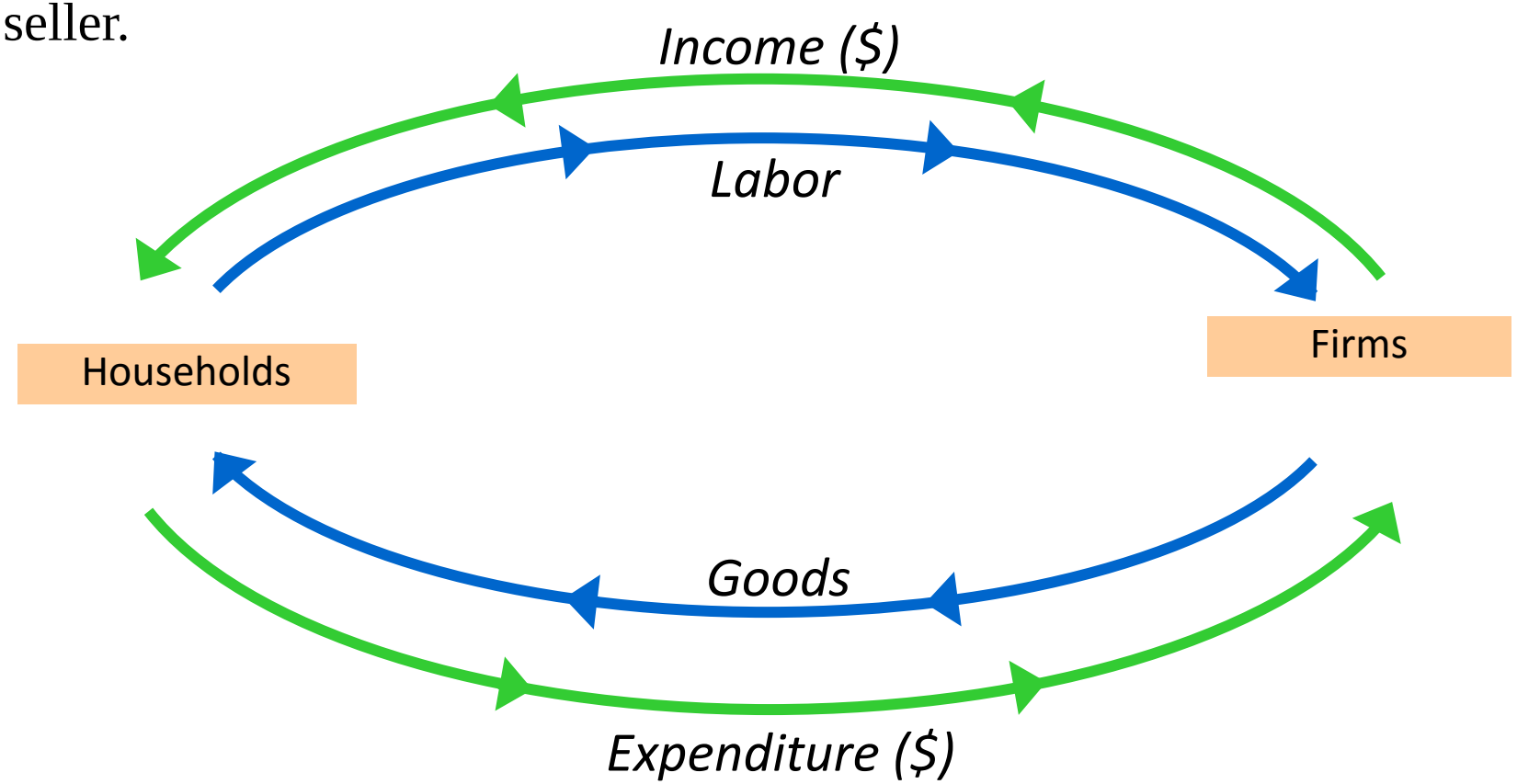
$$\text{GDP deflator} = 100 \times \frac{\text{Nominal GDP}}{\text{Real GDP}}$$

Gross Domestic Product: Expenditure and Income

Two definitions:

- Total expenditure on domestically-produced final goods and services.
- Total income earned by domestically-located factors of production.

- Expenditure equals income because every dollar spent by a buyer becomes income to the seller.



Method of calculating National Income

- **Income Method**

The Income Method measures national income from the side of payments made to the primary factors of production in the form of rent, wages, interest and profit for their productive services in an accounting year.

National Income = Rent + Compensation + Interest + Profit + Mixed income

Mixed income refers to the income of the self-employed individuals, farming units, and sole proprietorships.

- **Expenditure Method**

Expenditure approach focuses on the expenditure involved in the production of goods and services.

$$\mathbf{Y} = \underbrace{\mathbf{C} + \mathbf{I} + \mathbf{G} + \mathbf{NX}}_{\text{Aggregate Expenditure}}$$

Value of Total Output

C = Consumption

I = Investment

G = Government Spending

NX = Net Exports

- **Consumption:** It is the largest GDP component in the economy, consisting of private expenditures (household final consumption expenditure) in the economy. Personal expenditures fall under one of the following categories: durable goods, non-durable goods, and services.
- **Investment:** It includes capital expenditure on assets. It provides an indicator of the future productive capacity of the economy. It includes: Business fixed investment Residential fixed investment & Inventory investment
- **Government Spending:** It represents expenses undertaken y both State & Central Government for providing infrastructure, essential commodities, education, healthcare etc. Transfer Payments are excluded.
- **Net Exports:** The difference in exports & imports undertaken by a country in a Financial Year. Exports are considered an output for an economy whereas imports are considered as expenditure as they are not produced within an economy

Note:

- Any expenses on intermediate goods should not be considered as these are already included in the value of final goods.
- Transfer Payments such as scholarships, pensions are not included as they do not add value to the economy.
- Purchase of second hand goods is not included in this method. However brokerage is included

Value Added Method

The value-added method is also known as product method or output method, and its primary objective is calculating the national income by taking into account the value added to a product during the various stages of production.

The value of output minus the value of the intermediate goods used to produce that output .

GDP = Sum of value added at all stages of production

Stock & Flow Concept:

The concepts of stock and flow are used in macro economics or in the theory of income, output and employment.

A stock is a quantity measured at a point in time. A flow is a quantity measured per unit of time. A Stock can change due to flow, but the size of flows can be determined itself by changes in stock

Money is a stock variable, whereas the spending the money is a flow variable. The government debt is stock while the government deficit is a flow

- **Gross Investment:** The total addition made to the capital stock of economy in a given period is termed as Gross Investment. Capital stock consists of fixed assets and unsold stock. So, gross investment is the expenditure on purchase of fixed assets and unsold stock during the accounting year.

- **Net Investment:** The actual addition made to the capital stock of economy in a given period is termed as Net Investment.

Net Investment = Gross Investment – Depreciation

- **Depreciation (Consumption of Fixed Capital):** Depreciation refers to a fall in the value of fixed assets due to normal wear and tear, passage of time or expected obsolescence (change in technology).

- **Disposable Income:** Disposable income, also known as disposable personal income (DPI), is the amount of money that households have available for spending and saving after income taxes have been accounted for.
- **Disposable Income** = Personal Income – Personal Income Tax

  Disposable income minus all payments for necessities (mortgage, health insurance, food, transportation) equals **discretionary income.**

Leading & Lagging Indicators

Leading and lagging indicators are two types of measurements used when assessing performance in a organization or economy.

A leading indicator is a predictive measurement. For example; At the start of a recession, we may get a fall in share prices and fall in consumer confidence – these are leading indicators

A lagging indicator is an output measurement that tends to have a delayed reaction to a change in the economic cycle. For example: Unemployment is often a lagging indicator. It takes time for firms to respond to decline in output by getting rid of workers.

The difference between the two is a leading indicator can influence change and a lagging indicator can only record what has happened.

Example of Leading Indicator

1. Stock Market
2. Manufacturing Activity
3. Inventory Levels

Lagging Indicators

1. Income & Wages
2. Unemployment Rate
3. Income and Wages
4. Consumer Price Index

Fiscal Policy

Fiscal Responsibility and Budget Management Act, 2003

Objective of the Act was set targets for the Government of India to establish financial discipline, improve the management of public funds, strengthen fiscal prudence and reduce its fiscal deficits.

In **2016**, a committee under N K Singh was set up to suggest changes to the Act.

Key Highlights

The Central Government shall,-

(a) Take appropriate measures to limit the fiscal deficit upto three per cent. of gross domestic product by the 31st March, 2021;

(b) Endeavor to ensure that-

I. The general Government debt does not exceed sixty per cent.;

II. The Central Government debt does not exceed forty per cent, of gross domestic product by the end of financial year 2024-2025

III. Not give additional guarantees with respect to any loan on security of the Consolidated Fund of India in excess of one-half per cent of gross domestic product, in any financial year

(c) Any deviation from fiscal deficit target shall not exceed one-half per cent of the gross domestic product in a year except in the case of ground or grounds of national security, act of war, national calamity, collapse of agriculture severely affecting farm output and incomes, structural reforms in the economy with unanticipated fiscal implications, decline in real output growth of a quarter by at least three per cent points below its average of the previous four quarters

(d) The Central Government shall not borrow from the Reserve Bank but the Reserve Bank may buy and sell the Central Government securities in the secondary market

Revenue Receipt vs Capital Receipt

Government receipts are divided into two groups—Revenue Receipts and Capital Receipts.

Revenue Receipts:
Government receipts which neither (i) create liabilities nor (ii) reduce assets are called revenue receipts. These are proceeds of taxes, interest and dividend on government investment, cess and other receipts for services rendered by the government. This can be further bifurcated into Tax revenue & Non Tax Revenue.

Capital Receipts:
Government receipts which either (i) create liabilities (e.g. borrowing) or (ii) reduce assets (e.g. disinvestment) are called capital receipts. Thus when govt. raises funds either by incurring a liability or by disposing off its assets, it is called a capital receipt.

ABSTRACT OF RECEIPTS

(In ₹ crores)

	Actuals 2018-2019	Budget Estimates 2019-2020	Revised Estimates 2019-2020	Budget Estimates 2020-2021
REVENUE RECEIPTS				
1. Tax Revenue				
Gross Tax Revenue	**2080465.43**	**2461194.93**	**2163423.00**	**2423020.00**
Corporation Tax	663571.62	766000.00	610500.00	681000.00
Taxes on Income	473002.86	569000.00	559500.00	638000.00
Wealth Tax	40.86	...	...	...
Customs	117812.85	155904.00	125000.00	138000.00
Union Excise Duties	231981.90	300000.00	248012.00	267000.00
Service Tax	6903.62	...	1200.00	1020.00
Goods and Services Tax (GST)#	581559.30	663343.00	612327.00	690500.00
Taxes of Union Territories	5592.42	6947.93	6884.00	7500.00
Less - NCCD transferred to the National Calamity Contigency Fund/National Disaster Response Fund	**1800.16**	**2480.00**	**2790.00**	**2930.00**
Less - State's share	**761454.15**	**809133.02**	**656046.07**	**784180.87**
Centre's Net Tax Revenue	**1317211.12**	**1649581.91**	**1504586.93**	**1635909.13**
2. Non-Tax Revenue				
Interest receipts	12144.59	13711.23	11027.08	11042.04
Dividends and Profits	113420.51	163528.44	199892.92	155395.47
Other Non Tax Revenue	108249.75	133790.45	132499.28	216277.23
Receipts of Union Territories	1889.53	2149.00	2094.16	2302.56
Total Non Tax Revenue	**235704.38**	**313179.12**	**345513.44**	**385017.30**
I. Total Revenue Receipts	**1552915.50**	**1962761.03**	**1850100.37**	**2020926.43**
3. Capital Receipts				
A. Non-debt Receipts				
1. Recoveries of loans and advances@	18052.20	14827.72	16604.49	14966.67
2. Miscellaneous Capital Receipts	94726.87	105000.00	65000.00	210000.00
Total	*112779.07*	*119827.72*	*81604.49*	*224966.67*
B. Debt Receipts*				
1. Market Loans (Net)	422734.61	473122.01	473972.01	544869.62
2. Market Loans for Repayments	148265.39	236877.99	236027.99	235130.38
3. Market Loans for Buyback	...	50000.00	...	30000.00
4. Market Loans for Switching	28591.26	50000.00	165000.00	270000.00
5. Less Payments for Switching	-28058.99	-50000.00	-165000.00	-270000.00
6. Market Loans (Gross) (1+2+3)	571000.00	760000.00	710000.00	810000.00
7. Short Term/T-Bill Borrowings	6896.58	25000.00	25000.00	25000.00
8. External Loan (Net)	5519.28	-2952.05	4933.12	4621.65
9. Securities issued against Small Savings	124999.95	130000.00	240000.00	240000.00
10. State Provident Fund (Net)	16059.05	18000.00	18000.00	18000.00
11. Other Receipts (Net)^	73997.43	59531.61	4940.87	50848.54
12. Total Debt Receipts (1-3+4+5+7+8+9+10+11)	650739.17	652701.57	766846.00	849339.81
II. Total Capital Receipts (A+B12)	**763518.24**	**772529.29**	**848450.49**	**1074306.48**
4. Draw-Down of Cash Balance	**-1321.12**	**51059.13**	**...**	**-53002.81**
Total Receipts (I+II)	**2316433.74**	**2735290.32**	**2698550.86**	**3095232.91**
Receipts under MSS (Net)	**...**	**...**	**...**	**...**
@ excludes recoveries of short-term loans and advances from States, loans to Government servants, etc.	12204.74	51375.01	37675.00	51375.01

 # inclides GST compensation cess
** The receipts are net of payment*
^ includes receipts from reserve funds, deposits and advances, etc.

Revenue Expenditure vs Capital Expenditure

Government expenditure are divided into two groups—Revenue Expenditure and Capital Expenditure.

Revenue Expenditure:
An expenditure which neither creates assets nor reduces liability is called Revenue Expenditure, e.g., salaries of employees, interest payment on past debt, subsidies, pension, etc.

Capital Expenditure:
An expenditure which either creates an asset (e.g., Building) or reduces liability (e.g., Repayment of Loan) is called capital expenditure.

STATEMENT 1

SUMMARY OF EXPENDITURE

(In ₹crores)

MINISTRY/DEPARTMENT	Actuals 2018-2019			Budget Estimates 2019-2020			Revised Estimates 2019-2020			Budget Estimates 2020-2021		
	Revenue	Capital	Total	Revenue	Capital	Total	Revenue	Capital	Total	Revenue	Capital	Total
1. Central Expenditure (2+3+4)	1542664.19	294481.42	1837145.61	1858501.93	330717.36	2189219.29	1740356.48	341525.69	2081882.17	1926707.51	402276.51	2328984.02
2. Establishment	514756.72	6490.51	521247.23	538759.82	7536.42	546296.24	560214.12	6918.64	567132.76	602276.49	7308.30	609584.79
3. Central Sector Schemes	364691.69	273803.18	638494.87	568660.18	302134.28	870794.46	458524.99	314671.01	773196.00	497024.69	334800.37	831825.06
4. Other Central Expenditure	663215.78	14187.73	677403.51	751081.93	21046.66	772128.59	721617.37	19936.04	741553.41	827406.33	60167.84	887574.17
5. Transfers (6+7+8)	464734.90	13232.10	477967.00	589278.41	7851.75	597130.16	609288.19	7381.78	616669.97	703437.65	9808.42	713246.07
6. Centrally Sponsored Schemes	295927.44	101.41	296028.85	331544.07	65.51	331609.58	316760.91	54.65	316815.56	339838.77	55.76	339894.53
7. Finance Commission Transfers	93703.58	...	93703.58	120466.22	...	120466.22	123709.88	...	123709.88	149924.80	...	149924.80
8. Other Transfers	75103.88	13130.69	88234.57	137268.12	7786.24	145054.36	168817.40	7327.13	176144.53	213674.08	9752.66	223426.74
9. Total Expenditure through Budget (1+5)	2007399.09	307713.52	2315112.61	2447780.34	338569.11	2786349.45	2349644.67	348907.47	2698552.14	2630145.16	412084.93	3042230.09
10. Resources of Public Enterprises	...	607955.93	607955.93	...	537639.21	537639.21	...	710564.95	710564.95	...	672663.38	672663.38
11. Total Expenditure through Budget and Resources of Public Enterprises (9+10)	2007399.09	915669.45	2923068.54	2447780.34	876208.32	3323988.66	2349644.67	1059472.42	3409117.09	2630145.16	1084748.31	3714893.47

Government Finances (₹ Crore)##				
	April-November			
	2018-19	2019-20	2018-19	2019-20
1. Revenue Receipts	870306	983214	8.1	13.0
Gross tax revenue	1164685	1174143	7.1	0.8
Tax (net to Centre)	731669	750614	4.6	2.6
Non Tax	138637	232600	31.4	67.8
2. Capital Receipts, of which	742902	836843	10.2	12.6
Recovery of loans	10467	10910	10.5	4.2
Other Receipts	15810	18099	-69.8	14.5
Borrowings and other liabilities	716625	807834	17.1	12.7
3. Total Receipts (1+2)	1613208	1820057	9.1	12.8
4.Total Expenditure	1613208	1820057	9.1	12.8
(a) Revenue Expenditure	1421778	1606215	9.8	13.0
Interest payments	348233	341812	12.4	-1.8
(b) Capital Expenditure	191430	213842	4.0	11.7
5. Revenue Deficit	551472	623001	12.6	13.0
6.Effective Revenue Deficit	416686	493783	15.3	18.5
7. Fiscal Deficit	716625	807834	17.1	12.7
8. Primary Deficit	368392	466022	21.9	26.5

Government Deficit

Deficit is the amount by which the expends in a budget overreach the earnings. The Government Deficit is the amount of money in the budget set by which the government expend overreaches the government earning amount.

Revenue deficit

Revenue deficit is the excess of its total revenue expenditure to its total revenue receipts.

Revenue deficit = Revenue expenditure – Revenue Receipts

This indicates that the Government doesn't have sufficient revenue for the normal functioning of the government department.

Effective Revenue deficit: It is the difference between revenue deficit and grants for creation of capital assets

Fiscal Deficit

It is the excess of total expenditure over total receipts excluding borrowings i.e. it is the amount needed by the Government to meet its expenses.

Fiscal Deficit = Total expenditure – (Revenue receipts + Non-debt creating capital receipts)

Fiscal Deficit = Net borrowing at home + Borrowing from RBI + Borrowing from abroad

Primary Deficit

Primary deficit is the amount of money that the government requires to borrow apart from the interest payments on the formerly borrowed loans

Primary Deficit = Fiscal Deficit – Net interest liabilities

(₹ करोड़) (In ₹ crore)

		2018-2019 वास्तविक Actuals	2019-2020 बजट अनुमान Budget Estimates	2019-2020 संशोधित अनुमान Revised Estimates	2020-2021 बजट अनुमान Budget Estimates
1. राजकोषीय घाटा	1. **Fiscal Deficit**	**649418 (3.4)**	**703760 (3.3)**	**766846 (3.8)**	**796337 (3.5)**
2. राजस्व घाटा	2. **Revenue Deficit**	**454483 (2.4)**	**485019 (2.3)**	**499544 (2.4)**	**609219 (2.7)**
3. प्रभावी राजस्व घाटा	3. **Effective Revenue Deficit**	**262702 (1.4)**	**277686 (1.3)**	**307807 (1.5)**	**402719 (1.8)**
4. प्राथमिक घाटा	4. **Primary Deficit**	**66770 (0.4)**	**43289 (0.2)**	**141741 (0.7)**	**88134 (0.4)**

राजकोषीय घाटा वित्तपोषण के स्रोत ***Sources of Financing Fiscal Deficit***

(₹ करोड़) (In ₹ crore)

		2018-2019 वास्तविक Actuals	2019-2020 बजट अनुमान Budget Estimates	2019-2020 संशोधित अनुमान Revised Estimates	2020-2021 बजट अनुमान Budget Estimates
1. ऋण प्राप्तियां (निवल)	1. **Debt Receipts (Net)**				
2. *बाजार उधार (सरकारी प्रतिभूति+ राजकोषीय हुंडी+ पीओएलआईएफ)*	2. **Market Borrowings (G-sec +T Bills+POLIF)**	**430164**	**448122**	**498972**	**535870**
3. *अल्प बचतों के बदले प्रतिभूतियां*	3. **Securities against Small Savings**	**125000**	**130000**	**240000**	**240000**
4. *राज्य भविष्य निधियां*	4. **State Provident Funds**	**16059**	**18000**	**18000**	**18000**
5. *अन्य प्राप्तियां (आंतरिक ऋण तथा लोक लेखा)*	5. **Other Receipts (Internal Debts and Public Account)**	**73997**	**59532**	**4941**	**50848**
6. *विदेशी ऋण*	6. **External Debt**	**5519**	**(-)2952**	**4933**	**4622**
7. नकदी शेष का कम आहरण	7. **Draw Down of Cash Balance**	**(-) 1321**	**51059**	**...**	**(-) 53003**
8. कुल जोड़	8. **Grand Total**	**649418**	**703760**	**766846**	**796337**

Monetary Policy

Monetary Policy: Monetary policy is the macroeconomic policy laid down by the Reserve Bank of India. It involves the management of money supply and interest rates. It is bi-monthly meeting & the committee comprises of six members including RBI Governor.

Open Market Operations (OMO): It is an activity by a RBI to buy or sell government securities on the open market. Central banks use these operations as the primary means of implementing monetary policy.

Implications:

Sale of Government Securities → **Rupee Liquidity** ↓

Purchase of Government Securities → **Rupee Liquidity** ↑

Liquidity Adjustment Facility (LAF)

LAF is a facility extended by RBI to scheduled commercial banks and primary dealers to avail liquidity in case of requirement or park excess funds with the RBI in case of excess liquidity on an overnight basis against the collateral of Government securities including State Government securities.

The operations of LAF are conducted by way of repurchase agreements **(Repos and Reverse Repos with RBI)**

Direct & Indirect Instruments by RBI

Cash Reserve Ratio (CRR):

The average daily balance that a bank is required to maintain with the Reserve Bank as a share of such per cent of its Net demand and time liabilities (NDTL). Reduction in CRR augment primary liquidity in the banking system.

Minimum daily maintenance of the Cash Reserve Ratio was reduced from 90 per cent to 80 per cent up to September 25, 2020.

Current CRR Rate: 3%

Statutory Liquidity Ratio (SLR):

The share of NDTL that a bank is required to maintain in safe and liquid assets, such as, government securities, cash and gold. Changes in SLR often influence the availability of resources in the banking system for lending to the private sector. Banks has to update to RBI every alternate Friday regarding their SLR status.

The Reserve Bank of India raises SLR to control the bank credit during the time of inflation. Similarly, it decreases the SLR during the time of recession to increase bank credit.

Reserve Bank of India has the authority to increase this ratio by up to 40%

Current SLR Rate: 18%

Statutory Liquidity Ratio (SLR)	Cash Reserve Ratio (CRR)
In the case of SLR, banks are asked to have reserves of liquid assets which include both cash and gold.	The CRR requires banks to have only cash reserves with the RBI
Banks earn returns on money parked as SLR	Banks don’t earn returns on money parked as CRR
SLR is used to control the bank’s leverage for credit expansion.	The Central Bank controls the liquidity in the Banking system with CRR.
In the case of SLR, the securities are kept with the banks themselves which they need to maintain in the form of liquid assets.	In CRR, the cash reserve is maintained by the banks with the Reserve Bank of India.

Repurchasing Option (Repo Rate):

The interest rate at which the Reserve Bank provides overnight liquidity to banks against the collateral of government and other approved securities under the liquidity adjustment facility (LAF) i.e. banks borrow from RBI.

It is an instrument for borrowing funds by selling securities with an agreement to repurchase the said securities on a mutually agreed future date at an agreed price which includes interest for the funds borrowed.

Current Policy Repo Rate: **4.00%**

Repo Rate ↓ ⟶ Bank's Borrowing Cost ↓ ⟶ Borrowing Cost of Borrowers ↓ ⟶ Inflation ↑

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Reverse Repo Rate:

The interest rate at which the Reserve Bank absorbs liquidity, on an overnight basis, from banks against the collateral of eligible government securities under the LAF i.e. banks lend money to RBI.

Current Reverse Repo Rate: **3.35%**

Reverse Repo Rate ↑ ⟶ Money Supply ↓

Reverse Repo Rate ↓ ⟶ Money Supply ↑

Marginal Standing Facility (MSF):
A facility under which scheduled commercial banks can borrow additional amount of overnight money from the Reserve Bank by dipping into their Statutory Liquidity Ratio (SLR) portfolio up to a limit at a penal rate of interest. This provides a safety valve against unanticipated liquidity shocks to the banking system.
Current Marginal Standing Facility (MSF) Rate: **4.25%**

Bank Rate: It is the lending rate at which commercial banks can borrow from the RBI without providing any security. At this rate RBI is ready to buy or rediscount bills of exchange or other commercial papers.
Current Bank Rate: **4.25%**

Repo Rate	Bank Rate
Repo Rate is charged for repurchasing the securities sold by the commercial banks to the central bank.	Bank Rate is charged against loans offered by the central bank to commercial banks
Securities, bonds, agreements and collateral is involved	No collateral is involved
Short term financial needs	Long term financial requirements of commercial banks
Repo Rate is always lower than the Bank Rate.	

Impact of Monetary Policy on an Asset Class

Asset Class	Tight Monetary Policy	Relaxed Monetary Policy
Interest Rates	Higher	Lower
Equity	Lower Valuations	Higher Valuations
Bond	Lower Valuations	Higher Valuations
Cash (Deposits)	Better Returns	Lower Returns
Real Estate	Slump due to higher cost of borrowing	Growing trend due to lower interest and mortgage terms

Highlights of the Monetary Policy Committee 22nd May 2020

PRESS RELEASES

(501 kb)

Date : Jun 05, 2020

Minutes of the Monetary Policy Committee Meeting May 20 to 22, 2020

[Under Section 45ZL of the Reserve Bank of India Act, 1934]

The twenty third meeting of the Monetary Policy Committee (MPC), constituted under section 45ZB of the Reserve Bank of India Act, 1934, was held from May 20 to 22, 2020; the meeting was originally scheduled from June 3 to 5, 2020, but was advanced to May 20-22 in view of the ongoing COVID-19 pandemic.

2. The meeting was attended by all the members – Dr. Chetan Ghate, Professor, Indian Statistical Institute; Dr. Pami Dua, former Director, Delhi School of Economics; Dr. Ravindra H. Dholakia, former Professor, Indian Institute of Management, Ahmedabad; Dr. Janak Raj, Executive Director (the officer of the Reserve Bank nominated by the Central Board under Section 45ZB(2)(c) of the Reserve Bank of India Act, 1934); Dr. Michael Debabrata Patra, Deputy Governor in charge of monetary policy – and was chaired by Shri Shaktikanta Das, Governor. Dr. Chetan Ghate, Dr. Pami Dua and Dr. Ravindra H. Dholakia joined the meeting through video conference.

3. According to Section 45ZL of the Reserve Bank of India Act, 1934, the Reserve Bank shall publish, on the fourteenth day after every meeting of the Monetary Policy Committee, the minutes of the proceedings of the meeting which shall include the following, namely:

a. the resolution adopted at the meeting of the Monetary Policy Committee;

b. the vote of each member of the Monetary Policy Committee, ascribed to such member, on the resolution adopted in the said meeting; and

c. the statement of each member of the Monetary Policy Committee under sub-section (11) of section 45ZI on the resolution adopted in the said meeting.

4. The MPC reviewed the surveys conducted by the Reserve Bank to gauge consumer confidence, households' inflation expectations and the projections of professional forecasters. The MPC also reviewed in detail staff's macroeconomic projections, and alternative scenarios around various risks to the outlook. Drawing on the above and after extensive discussions on the stance of monetary policy, the MPC adopted the resolution that is set out below.

Resolution

5. On the basis of an assessment of the current and evolving macroeconomic situation, the Monetary Policy Committee (MPC) at its meeting today (May 22, 2020) decided to:

- reduce the policy repo rate under the liquidity adjustment facility (LAF) by 40 bps to 4.0 per cent from 4.40 per cent with immediate effect;
- accordingly, the marginal standing facility (MSF) rate and the Bank Rate stand reduced to 4.25 per cent from 4.65 per cent; and
- the reverse repo rate under the LAF stands reduced to 3.35 per cent from 3.75 per cent.
- The MPC also decided to continue with the accommodative stance as long as it is necessary to revive growth and mitigate the impact of COVID-19 on the economy, while ensuring that inflation remains within the target.

These decisions are in consonance with the objective of achieving the medium-term target for consumer price index (CPI) inflation of 4 per cent within a band of +/- 2 per cent, while supporting growth.

2020
2019
2018
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Archives

Highlights of the Monetary Policy Committee 6th August 2020

PRESS RELEASES

(388 kb)

Date : Aug 06, 2020

Monetary Policy Statement, 2020-21 Resolution of the Monetary Policy Committee (MPC) August 4 to 6, 2020

On the basis of an assessment of the current and evolving macroeconomic situation, the Monetary Policy Committee (MPC) at its meeting today (August 6, 2020) decided to:

- keep the policy repo rate under the liquidity adjustment facility (LAF) unchanged at 4.0 per cent.

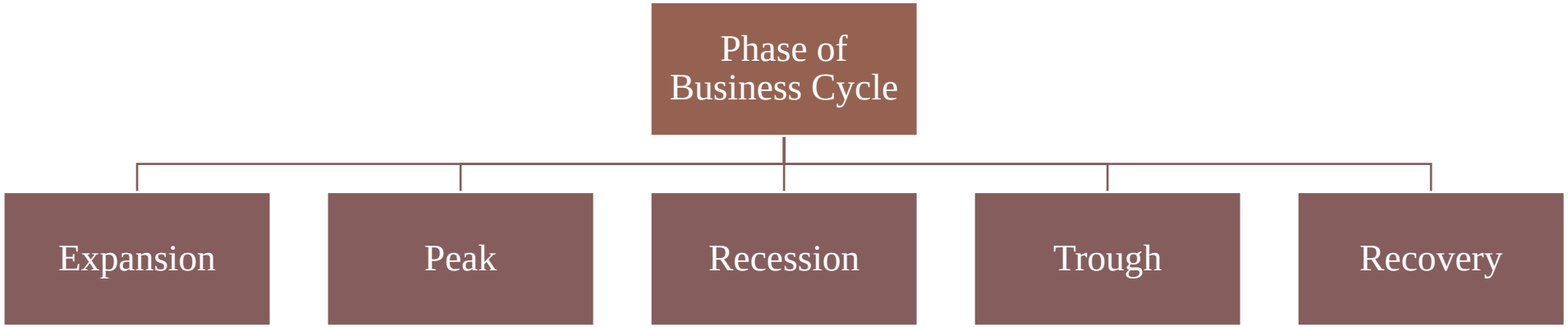
Consequently, the reverse repo rate under the LAF remains unchanged at 3.35 per cent and the marginal standing facility (MSF) rate and the Bank Rate at 4.25 per cent.

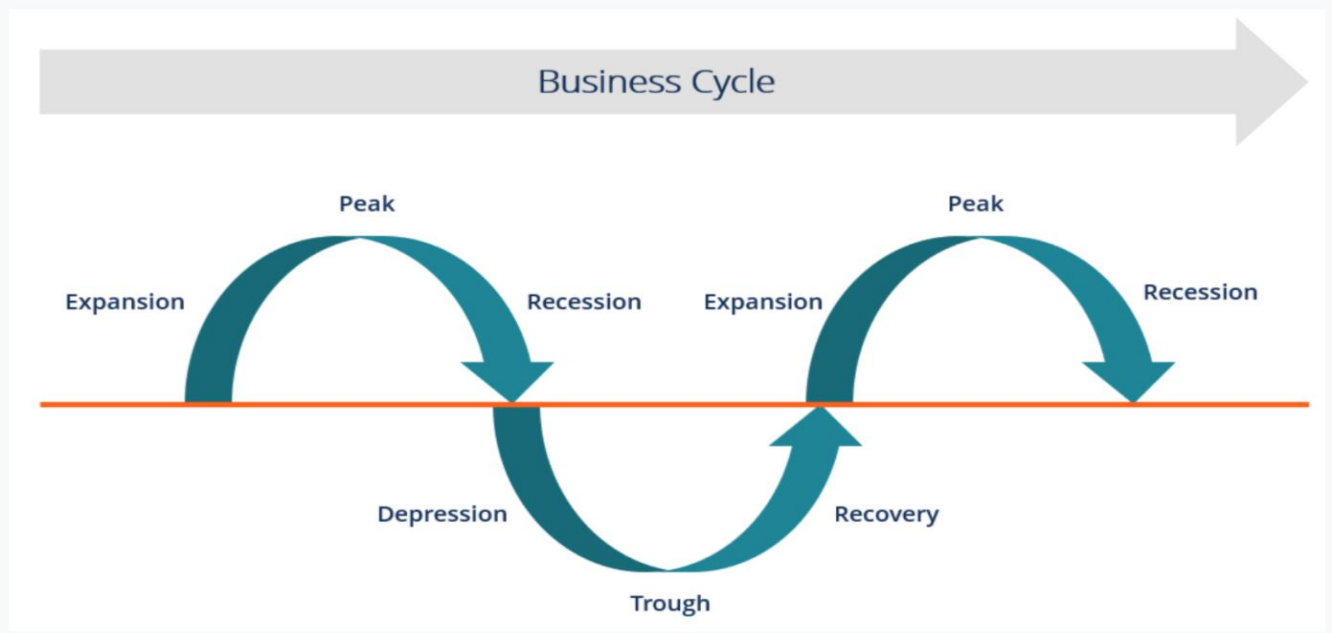
- The MPC also decided to continue with the accommodative stance as long as it is necessary to revive growth and mitigate the impact of COVID-19 on the economy, while ensuring that inflation remains within the target going forward.

These decisions are in consonance with the objective of achieving the medium-term target for consumer price index (CPI) inflation of 4 per cent within a band of +/- 2 per cent, while supporting growth.

Business Cycle

A business cycle, also called economic cycle, is a period of changing economic activity comprised of expansions and contractions as measured by **real GDP.**





Expansion: The first stage in the business cycle is expansion. In this stage, there is an increase in positive economic indicators such as employment, income, output, wages, profits, demand, and supply of goods and services. Debtors are generally paying their debts on time, the velocity of the money supply is high, and investment is high. This process continues as long as economic conditions are favorable for expansion.

Peak: The economy then reaches a saturation point, or peak, which is the second stage of the business cycle. A peak is the highest point of the business cycle. In peak phase, there is a gradual decrease in the demand of various products due to increase in the prices of input. The increase in the prices of input leads to an increase in the prices of final products, while the income of individuals remains constant.

Recession: In recession phase, all the economic factors, such as production, prices, saving and investment, starts decreasing Generally, producers are unaware of decrease in the demand of products and they continue to produce goods and services. In such a case, the supply of products exceeds the demand. Commonly cited definition of a recession being signalled by two consecutive quarters of decline in real GDP. if the economy does not begin to expand again then the economy may be considered to be in a state of **depression.**

Trough: In the depression stage, the economy's growth rate becomes negative. There is further decline until the prices of factors, as well as the demand and supply of goods and services, reach their lowest point. The economy eventually reaches the trough. It is the negative saturation point for an economy.

In this phase, it becomes difficult for debtors to pay off their debts. As a result, the rate of interest decreases; therefore, banks do not prefer to lend money. Consequently, banks face the situation of increase in their cash balances.

Recovery: After this stage, the economy comes to the stage of recovery. In this phase, there is a turnaround from the trough and the economy starts recovering from the negative growth rate. Demand starts to pick up due to the lowest prices and, consequently, supply starts reacting, too. In addition in recovery phase, bankers start utilizing their accumulated cash balances by declining the lending rate and increasing investment in various securities and bonds

Finance and Financial Statement Analysis

- Finance: basic concepts of finance including time value of money
- Decisions in finance - investment decision; financing decision; dividend decision; net present value; internal rate of return; payback period
- Financial statement analysis: financial statements; operating and non-operating assets; liabilities; incomes and expenses; profit and loss analysis; balance sheet analysis; ratio analysis; performance analysis; capital structure analysis; credit analysis; cash flow analysis

Basic Concept of Finance

Basic Concepts

- **Risk/Return Trade-off:** Higher risk is associated with greater probability of higher return and lower risk with a greater probability of smaller return.
- **Diversification:** Diversification is a risk management technique that mixes a wide variety of investments within a portfolio. The rationale behind this technique contends that a portfolio constructed of different kinds of investments will, on average, yield higher returns and pose a lower risk than any individual investment found within the portfolio
- **Cost Averaging:** This is a method in which a fixed sum is invested on a regular basis, irrespective of the market trends. Thus more shares (units) are bought when the market prices are low and less when they are high.
- **Asset Allocation:** Asset allocation is an investment strategy that aims to balance risk and reward by apportioning a portfolio assets according to an individual's goals, risk tolerance and investment horizon.
- **Random Walk Theory:** This theory holds that stock prices take a random path, and one that is unpredictable. It suggests that changes in stock prices have the same distribution and are independent of each other, therefore, the past movement or trend of a stock price or market cannot be used to predict its future movement

Basic Concepts

- **Efficient Market Hypothesis:** is an investment theory whereby share prices reflect all information and consistent alpha generation is impossible. Theoretically, neither technical nor fundamental analysis can produce risk-adjusted excess returns, or alpha, consistently and only inside information can result in outsized risk-adjusted returns. According to the EMH, stocks always trade at their fair value on stock exchanges, making it impossible for investors to either purchase undervalued stocks or sell stocks for inflated prices.
- **The Optimal Portfolio:** This theory assumes that investors focus their efforts on minimizing risk while also striving to attain the highest possible return.
- **Capital Asset Pricing Mode:** CAPM describes the relationship between an investor's risk and the expected return.

Required Return or expected Return = Risk free Rate + Beta*(market Return – Risk free Rate)

- **Cost of Capital:** Cost of capital = Cost of Equity + Cost of Debt, where both multiplied by appropriate weightage.

Cost of Equity = Risk free rate of return + β (Expected market return – Risk free return)

Time Value of Money

- **Time value of Money in Financial Decisions**
- Money that is available at the present time is worth more than the same amount in the future, due to its potential earning capacity. This core principle of finance holds that provided money can earn interest, any amount of money is worth more the sooner it is received. Reasons;
- Risk: Uncertainty about the receipt of money in future
- Inflation: Rupee today presents a greater purchasing power than a year later
- Investment Opportunities: Because of availability of opportunity of investment for earnings additional cash flow.
- Present value decreases at a decreasing rate.

Time Value of Money

- Be able to compute the future value of an investment made today
- Be able to compute the present value of cash to be received at some future date
- Be able to compute the return on an investment
- Be able to compute the number of periods that equates a present value and a future value given an interest rate
- Be able to use a financial calculator and a spreadsheet to solve time value of money problems

Chapter Outline

- Future Value and Compounding
- Present Value and Discounting

Timelines

- Show the timing of cash flows.
- Tick marks occur at the end of periods, so Time 0 is today; Time 1 is the end of the first period (year, month, etc.) or the beginning of the second period.
- i%= Discount rate or Cost of capital or Opportunity cost of capital or Required Return

Future Value

- Suppose you invest 1000 for one year at 5% per year. What is the future value in one year?
  - Interest = 1000(.05) = 50
  - Value in one year = principal + interest = 1000 + 50 = 1050
  - Future Value (FV) = 1000(1 + .05) = 1050
- Suppose you leave the money in for another year. How much will you have two years from now?
  - FV = 1000(1.05)(1.05) = 1000(1.05)^2 = 1102.50

- Future Value Formula: FV = PV(1 + r)^t

  FV = future value

  PV = present value

  r = period interest rate, expressed as a decimal

  t = number of periods

Future Value

Intra Year Compounding

Interest is compounded more than once in a year. If a cashflow is compounded more frequently than annually, then intrayear compounding is used.

Formula:

FV = PV*(1 + r/m)^n*m

FV = future value

PV = present value

r = period interest rate, expressed as a decimal

n= Number of years to maturity

m= Number of times compounding is to be done in an year

Quick Quiz

Suppose you have Rs 10,000 to invest and you believe that you will earn 8% per year over the next 5 years.

- How much would you have at the end of 5 years if compounded annually?
- How much would you have using simple interest?
- If the interest is compounded quarterly?

Present Value

Present Value is the current value of a “Future Amount”. If we expect a fixed amount **after** n number of years, then by discounting the future amount at the current prevailing interest rate, we will get the present value of future cashflows. This process is also known as **Discounting** i.e. discounting is the process of determining the present value of future cashflows.

Formula:
PV = FV/(1 + r)^n

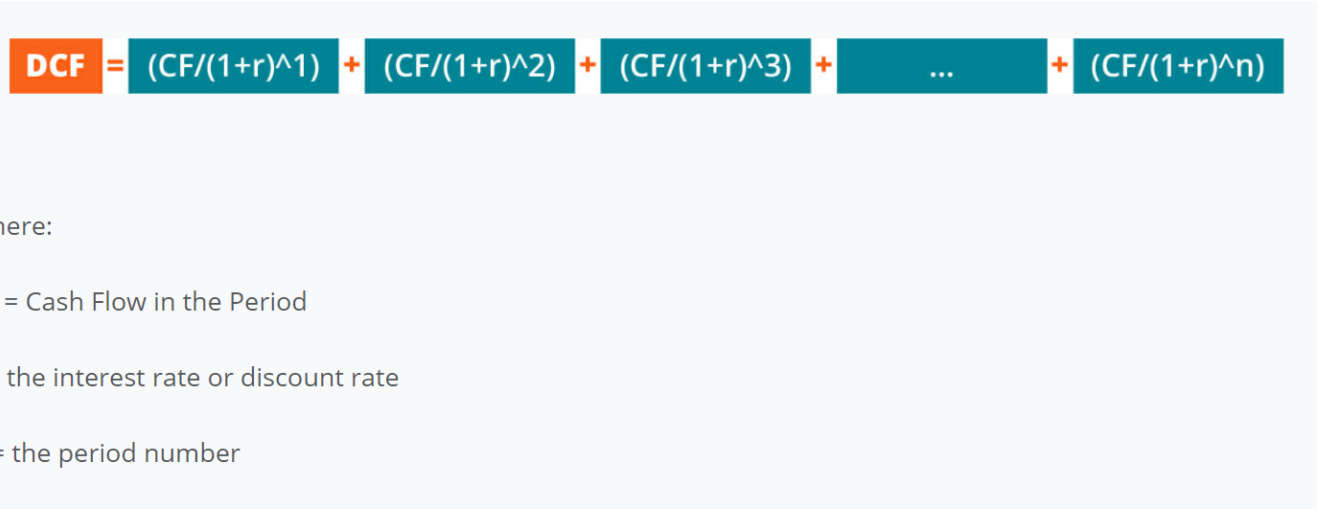
Discounting is the inverse of compounding.

Example:
Your parents set up a trust fund for you 10 years ago that is now worth 19,671.51. If the fund earned 7% per year, how much did your parents invest?

N = 10; r = 0.07; FV = 19,671.51
PV = 10,000

Present Value with multiple cashflows

Sometimes instead of a single cashflow, cashflows are received for a number of years. The present value is calculated by:



Example:

A doctor is planning to buy an X-Ray machine for hospital. He has 2 options: Either purchase of by making a cash payment of Rs 5 Lakhs today or Rs 6,15,000 are to be paid in six annual installments. Assuming the rate of return = 12%.

Option 1: Rs 5,00,000 Option 2: Annual Installment: 6,15,000/6 = 1,02,500. PV = 4,21,378.

Present Value with multiple cashflows

4. An investment pays Rs. 300 annually for five years, with the first payment occurring today. The present value (PV) of the investment discounted at a 4% annual rate is approximately _____.
   a. 1336
   b. 1389
   c. 1625
   d. 1925

Perpetuity

Perpetuity is a cash flow without a fixed time horizon. It is an annuity in which the periodic payments or receipts on a fixed date and continue indefinitely or perpetually. Example: Fixed Coupon Payments.

Formula:
PV = (Cashflow expected to be earned/spent at the end of each year in perpetuity)/ Required Rate of return

Example:

Ramesh wants to retire & receive Rs 3,000 per month. He want to pass this monthly payment to future generations. He can earn an interest of 8% compounded annually. How much will he need to set aside to achieve his perpetuity goal.

Ans: Cashflow = Rs 3,000
R = 0.08/12

PV = 3,000/0.00667 = Rs 4,49,775.
If he wanted the payments to start today, he can achieve by depositing 3,000 extra total = Rs 4,52,775

Decision in Finance

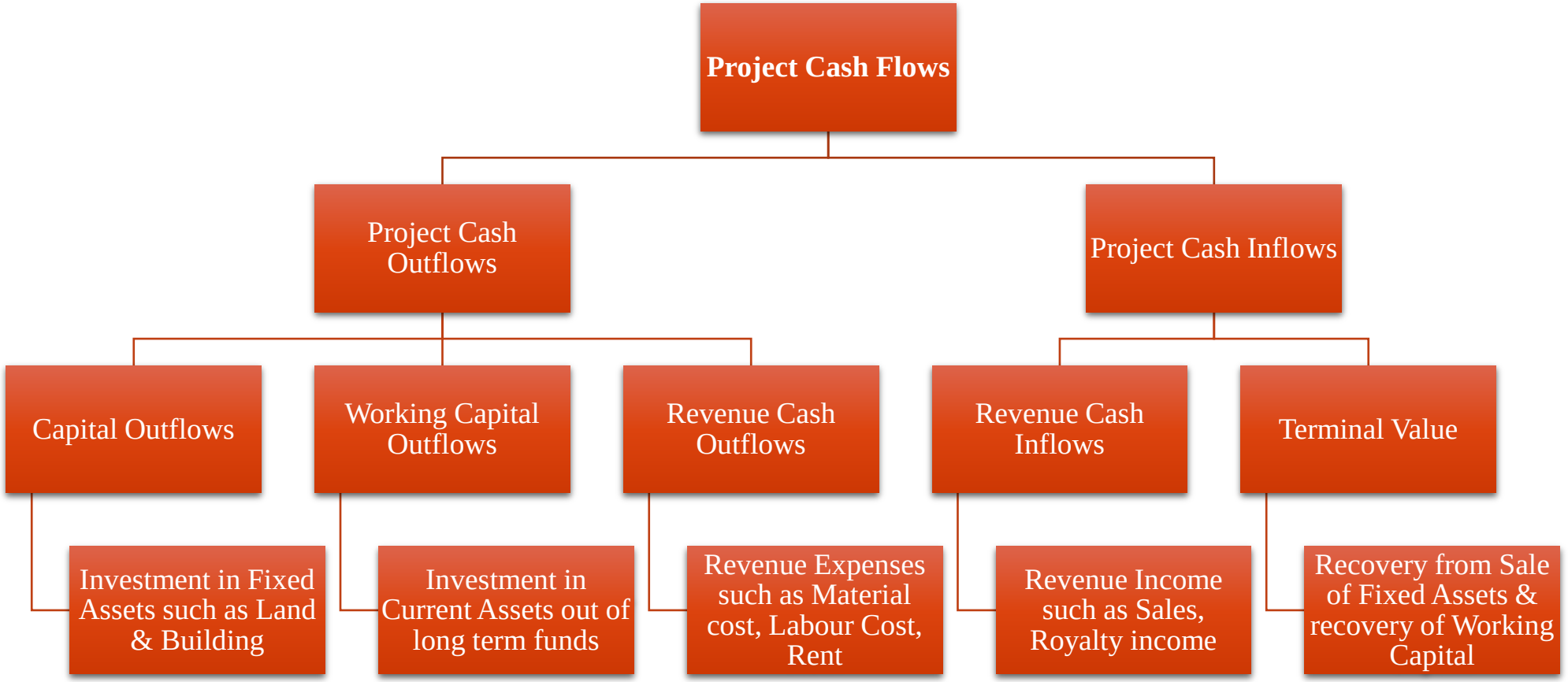
Investment Decision

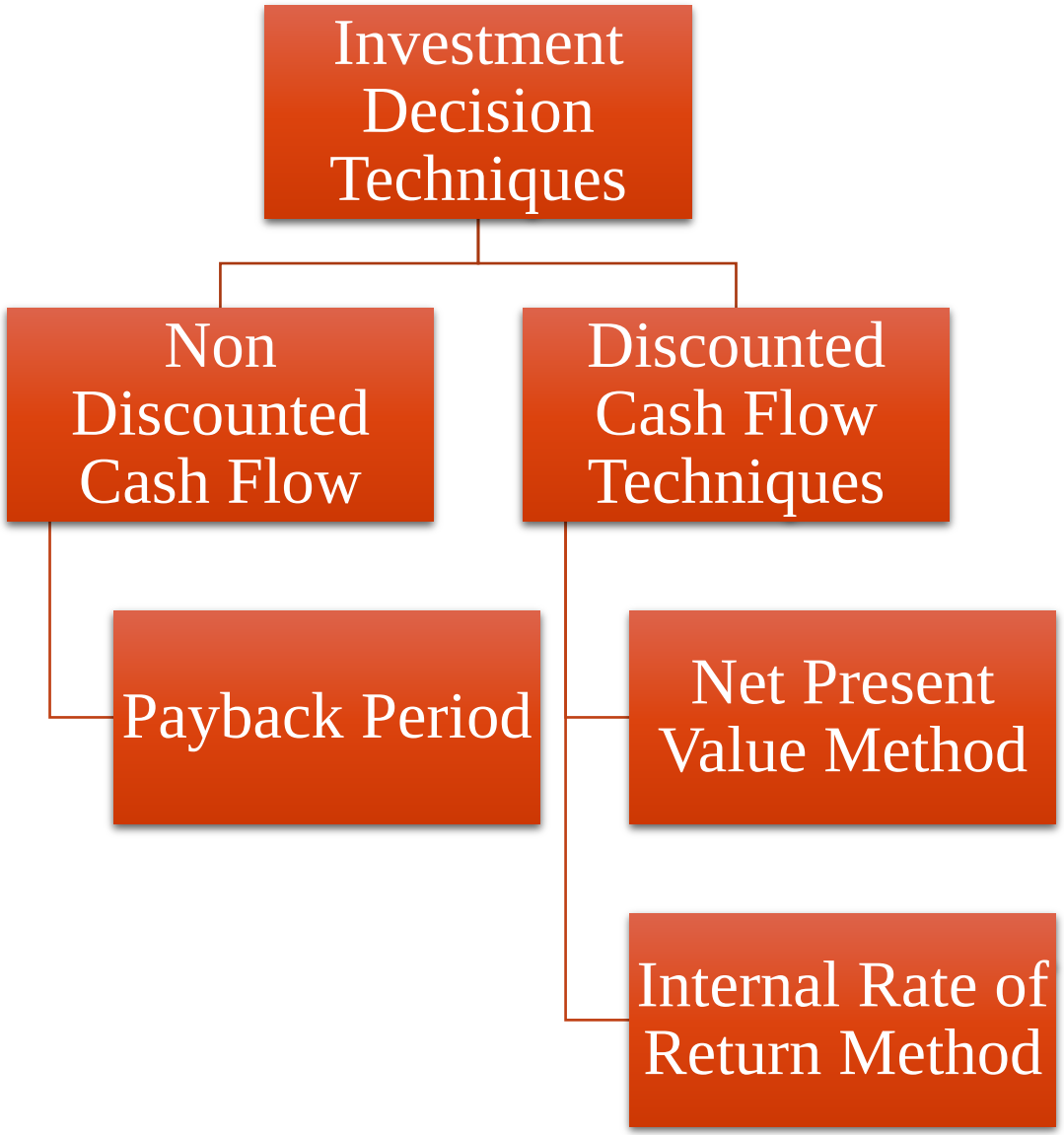
Investment decision refers to commitments of resources made in the hope of realizing benefits that are expected to occur over a reasonable long period of time in future. It includes searching for new & more profitable investment proposal.

Capital Budgeting

It is a formal process undertaken by the firm of evaluating and selecting long term investments that are in line with the goal of maximization of wealth of owners i.e. it involves evaluating investment projects that are strategic to business overall objectives and estimating and evaluating incremental cash flows & profitability for each of the investment proposals.

- Net Present Value
- Payback Period
- Internal Rate of Return


Project Cash Flows
Project Cash Outflows
Project Cash Inflows
Capital Outflows
Working Capital Outflows
Revenue Cash Outflows
Revenue Cash Inflows
Terminal Value
Investment in Fixed Assets such as Land & Building
Investment in Current Assets out of long term funds
Revenue Expenses such as Material cost, Labour Cost, Rent
Revenue Income such as Sales, Royalty income
Recovery from Sale of Fixed Assets & recovery of Working Capital


Investment Decision Techniques
Non Discounted Cash Flow
Discounted Cash Flow Techniques
Payback Period
Net Present Value Method
Internal Rate of Return Method

Payback Period

It is one of the traditional method of evaluating capital investment is Payback Period. It is the number of years it takes a firms to recover its original investment from net cash flows i.e. it is the length of time required for the cumulative total net cash flows from the investment to equal the total initial cash outlays

Formula:

Pay Back Period = Initial Investment/ After Tax Annual Cash Inflows

Decision Criteria: Earlier the better.

Question: A company is contemplating to purchase either of the 2 machinery costing 5 Lakhs each. Earning after taxation expected as follows

Year	Machine A	Machine B
1	1.5	0.5
2	2.0	1.5
3	2.5	2.0
4	1.5	3.0
5	1.0	2.0

Ans:
Machine A= 2.6 Years
Machine B = 3.33 Years

Net Present Value Method

It is a method of discounting cash flows i.e. cash flows to be received in future are discounted with the rate of return to determine the Present Value of cash Inflows. Higher the NPV, better it is.

Formula:

$NPV = CF_0/(1+k)^0 + CF_1/(1+k)^1 + CF_2/(1+k)^2 \ldots\ldots CF_n/(1+k)^n - \text{Cash Outflow}_0$

If NPV > 0, accept the proposal.

Question: In the earlier question, a discounting rate of 10% is to be used & the machine is to be written off in 5 years by straight line method of depreciation with nil residual value.

Ans:
Machine A NPV= 1.5385
Machine B NPV= 1.4865

Question: What if the machine has a scrap value of Rs 20,000 at the end of Year 5.

Internal Rate of Return

It is the rate at which present value of cash outflows is equal to present value of cash inflows. IRR can be determined using a financial calculator (recommended) or by trial and error. the trial and error method is performed by discounting the project's cash inflows at various discount rates until you find the one that satisfies the formula.

Formula:

$0 = CF_0/(1+k)^0 + CF_1/(1+k)^1 + CF_2/(1+k)^2 \ldots\ldots CF_n/(1+k)^n$ – Cash $Outflow_0$

Higher the better. Project having IRR more than or equal to cost of capital can be considered.

Discounted Cash Flows:

It estimates the value of an investment based on its future cash flows. DCF analysis attempts to figure out the value of an investment today, based on projections of how much money it will generate in the future.

$$DCF = CF_1/(1+r)^1 + CF_2/(1+r)^2 + CF_n/(1+r)^n$$

Discounted Payback Period

Discounted payback period has plugged the deficiency of Payback period of ignoring time value of money.
It refers to the period within which the Present value of cash inflows completely recover the Present Value of Cash outflows. Earlier the better.

Pay Back Period = Initial Investment/ After Tax discounted 3Annual Cash Inflows

Question 3: A company has to make a choice between two projects namely A and B. The initial capital outlay of two Projects are ₹1,35,000 and ₹2,40,000 respectively for A and B. There will be no scrap value at the end of the life of both the projects. The opportunity cost of capital of the company is 16%. The annual cash inflows are as under:

Year	Project A	Project B	Discounting Factor @ 16%
1	-	60,000	0.862
2	30,000	84,000	0.743
3	1,32,000	96,000	0.641
4	84,000	1,02,000	0.552
5	84,000	90,000	0.476

You are required to calculate for each project:

(i) Discounted Payback Period
(ii) Profitability Index
(iii) Net Present Value

Ratio Analysis

Ratio analysis is a quantitative method of gaining insight into a company's liquidity, operational efficiency, and profitability by studying its financial statements such as the balance sheet and income statement.

Objective:

- Liquidity Position
- Operating Efficiencies
- Long Term Solvency
- Trend Analysis
- Identify the Improving Areas of a Company

Types of Ratios

- Profitability Ratios: How effectively a company’s management has generated profit
- Activity Ratios: How effectively Company is using assets to generate profits
- Liquidity Ratios: Company’s ability to meet short term financial obligations
- Coverage Ratios: It is a comparisons designed to measure a company’s ability to pay its liabilities.

Profitability Ratios

Company's Objective: Income ↑ ⟶ Profits ↑

Word Profitability comprises of 2 words, "Profit" i.e. the excess of total revenue over expenses & "Ability" i.e. power of a concern to earn profits.

Gross Profit Ratio (GP Ratio)

$$\text{Gross profit ratio} = \frac{\text{Gross profit}}{\text{Net sales}}$$

This ratio calculates the profitability of business. Higher the ratio, higher the profitability of a company.

Implications:

Higher Ration can indicate:

Higher Sales price without corresponding increase in COGS or

Declining COGS with no change in Sales price

Cost of Goods Sold Ratio (COGS)

COGS Ratio = Cost of Goods Sold/Net Sales * 100

Cost of Goods Sold= Opening Stock + Net Purchases + Direct Expenses – Closing Stock

Net Sales = Total Sales – Sales Return

Lower the Ratio, the better it is.

COGS Ratio = 100 – GP Ratio

Profit Volume Ratio (P/V Ratio)
P/V Ratio = Contribution/ Sales * 100
Contribution= Sales – Variable Cost or Fixed Cost + Profit
Higher the ratio, better the “Financial Health” of the company.

Return on Capital Employed (ROCE) or Return on Investment (ROI)
ROCE = (Operating Net Profit before Interest & Tax or EBIT)/ Capital Employed * 100
Capital Employed = Equity Share Capital + Reserves & Surplus + Preference Share Capital + Long Term Debt – Non Trade Assets

The ratio is an indicator of the earning capacity on the capital employed in the business i.e. how effectively the long terms funds have been used. It is an important ratio for making investment decisions.

Return on Equity (ROE)
ROE = Net profit after Tax – Preference Dividend/ Shareholder’s funds * 100
Shareholder’s funds= Equity Share Capital + Reserves & Surplus (Excl. Revaluation Reserves)
The ratio indicates the profitability objective of the shareholders of the company is achieved or not.
Higher the Ratio, better it is.
Calculation of Return on total shareholders.

Activity Based Ratio: It is computed to evaluate the efficiency with which the firm manages and utilise its assets & capital.

Fixed Assets Turnover Ratio:

Ratio = Net Sales / Net Fixed Assets

Net Fixed Assets = Gross Fixed Assets (Gross Block) – Accumulated Depreciation

This ratio indicates how effectively the fixed assets of a company are used. The ratio is majorly used in manufacturing concern since sales are produced by the capital invested in Fixed Assets.

A high ratio indicates efficient utilisation of fixed assets in generating sales.

Debtor Turnover Ratio

Ratio = Net Credit Sales / Accounts Receivable (Debtors + Bills Receivable)

It measures the number of times on average, the debtors are collected during the period i.e. This ratio measures the efficiency of a firm in managing and collecting the credit issued to the customers.

Stock or Inventory Turnover Ratio

Ratio = Cost of Goods Sold/ Average Inventory

It measures the number of times on an average the inventory is sold during the period. Higher the ratio, the lesser the cash is tied up in the inventory therefore higher the ratio, the better it is.

Liquidity Ratio:

It aims to measure the short term ability of a company to pay its maturing obligations and meet unexpected needs of cash.

It comprises of

Current Ratio

The current ratio measures a company's ability to pay off its current liabilities (payable within one year) with its current assets such as cash, accounts receivable and inventories. The higher the ratio, the better the company's liquidity position.

Current Ratio = Current Assets / Current Liability

If the ratio is less than 2:1, the company may have difficulty in meeting its current obligations.

Quick Ratio

The quick ratio measures a company's ability to meet its short-term obligations with its most liquid assets and therefore excludes inventories from its current assets.

Quick Ratio = Liquid Assets/ Current Liabilities

Liquid Assets = Current Assets - Stock – Prepaid Expenses

Ideal Quick Ratio = 1:1

Coverage Ratio

A coverage ratio, broadly, is a group of measures of a company's ability to service its debt and meet its financial obligations such as interests payments or dividends. The higher the coverage ratio, the easier it should be to make interest payments on its debt or pay dividends.

Interest Coverage Ratio

Ratio = Earning before Interest & Taxes/ Interest on Loan Term Debts

This ratio indicates the debt servicing capability of a company i.e. Capacity to pay fixed interest on long term debt. It represent the number of times the interest charges are covered by the income out of which they will be paid i.e. margin of safety for the lenders. Higher the Ratio, better it is.

Equity Dividends Coverage Ratio

Ratio = Earning per Share/ Dividend per Share or (Earnings after Tax- Preference Dividend)/ Equity Dividend
It denotes the number of times the total equity dividends are covered by earnings available for equity shareholders. It helps in assessing the prospects for divided increases.

Debt Service Coverage Ratio

$$\text{Debt Service Coverage Ratio} = \frac{\text{EBITDA}}{\text{Interest + Principal}}$$

It is important from lenders business can earn sufficient profits to pay interest & principle installments. Normally DSCR of 1.5-2 is satisfactory.

Coverage Ratio

Fixed Charges Coverage Ratio

This ratio shows how many times the cash flow before interest and taxes covers all fixed financing charges. The ratio of more than 1 is considered safe.

$$\textbf{Fixed Charges Coverage Ratio} = \frac{\text{EBIT} + \text{Depreciation}}{\text{Interest} + \frac{\text{Repayment of loan}}{\text{1- Tax rate}}}$$

Capitalization Ratio

Capitalization ratios are indicators that measure the proportion of debt in a company's capital structure. It gives an important insight into the use of financial leverage by a company & focuses on the relationship of long-term debt as a component of the company's total capital base.

$$\textbf{Capitalization Ratio} = \frac{\text{Long Term Debt}}{\text{Long Term Debt} + \text{Shareholders Equity}}$$

Other Important Ratios

Debt-Equity Ratio

Ratio = Debt/ Equity

The ratio indicates the relationship between the long term debts & shareholders funds (Equity + Preference Shares + Post Accumulated profits). The ratio indicates the relative portion of debt and equity in financing the assets of a company.
Ideal Debt Equity Ratio is 2:1.
A lower ratio is a favourable for long term creditors i.e. a larger margin of safety.
A higher ratio indicates hinderance from the owner's prospective as it effects the future capability of raising additional debt.

Price Earning Ratio (P/E Ratio)

P/E Ratio = Market Price per Equity Share/ Earnings per Share

The ratio helps investors determine the market value of a stock as compared to the company's earnings.
High growth shares have high P/E ratios as the investors are willing to pay greater multiple of current earnings.

Dividend Yield Ratio

Dividend Yield Ratio = Dividend per Share/ Market Price per Share * 100

It indicates the current level of income for an investor from a share. The ration is important for investors who are interested in divided income.

Other Important Ratios

Capital Gearing Ratio

In addition to Debt-equity ratio, sometimes capital gearing ration is calculated to show the proportion of fixed interest (dividend) bearing capital to funds belonging to equity shareholders.

Capital Gearing Ratio = (Preference Share Capital + Debenture + Other Borrowed Funds)
(Equity Share Capital + Reserves & Surplus – Losses)

Mean, Median & Mode

Mean: The "average" number; found by adding all data points and dividing by the number of data points.

Types of Mean:

- **Arithmetic Mean:** It is computed by adding all the values in the data set divided by the number of observations in it.
- **Weighted Mean:** Weighted mean is calculated when certain values in a data set are more important than the others. A weight wi is attached to each of the values xi to reflect this importance.
- **Geometric Mean:** Geometric mean is the average of a set of products. The geometric mean must be used when working with percentages.

For example, suppose you have an investment which earns 10% the first year, 50% the second year, and 30% the third year. What is its average rate of return? It is not the arithmetic mean. The relevant quantity is the geometric mean of these three numbers.

Formula: $g = \sqrt[n]{x_1 \times \cdots \times x_n}$

Harmonic Mean: It is the reciprocal of the arithmetic mean of the observations. HM is appropriate in situations where the reciprocals of values are more useful. The weighted harmonic mean is used in finance to average multiples like the price-earnings ratio because it gives equal weight to each data point.

Median: The middle number; found by ordering all data points and picking out the one in the middle.

Mode: The most frequent number—that is, the number that occurs the highest number of times.

Mean, Median & Mode

Median: The middle number; found by ordering all data points and picking out the one in the middle.
If the total number of observation given is odd, then the formula to calculate the median is:

$$\textbf{Median} = \{(n+1)/2\}^{th}\textbf{term}$$

If the total number of observation is even, then the median formula is:

$$\textbf{Median} = [(n/2)^{th}\ \textbf{term} + \{(n/2)+1\}^{th}]/2$$

Mode: The most frequent number—that is, the number that occurs the highest number of times.

Karl Pearson expressed this relationship as the distance between the mean and median is about one-third of the distance between the mean and mode:

Mode = Mean - 3 [Mean - Median]

Variance, Co-Variance & Standard Deviation

Measures of dispersion provide information on the spread of the data around the centre.

Variance

The variance is the average of the squared differences from the mean.

$$\sigma^2 = \frac{\sum_{i=1}^{n}(xi - \mu)^2}{N}$$

Standard Deviation

Standard deviation is a statistic that looks at how far from the mean a group of numbers is, by using the square root of the variance

Covariance

Covariance measures the directional relationship between the returns on two assets. A positive covariance means that asset returns move together while a negative covariance means they move inversely.

Covariance signifies the direction of the linear relationship between the two variables

$$\text{Cov}\,(X, Y) = \frac{\sum(X_i - \overline{X})(Y_j - \overline{Y})}{n}$$

Correlation

It is obtained by dividing the covariance of the two variables by the product of their standard deviations.

The values of the correlation coefficient can range from -1 to

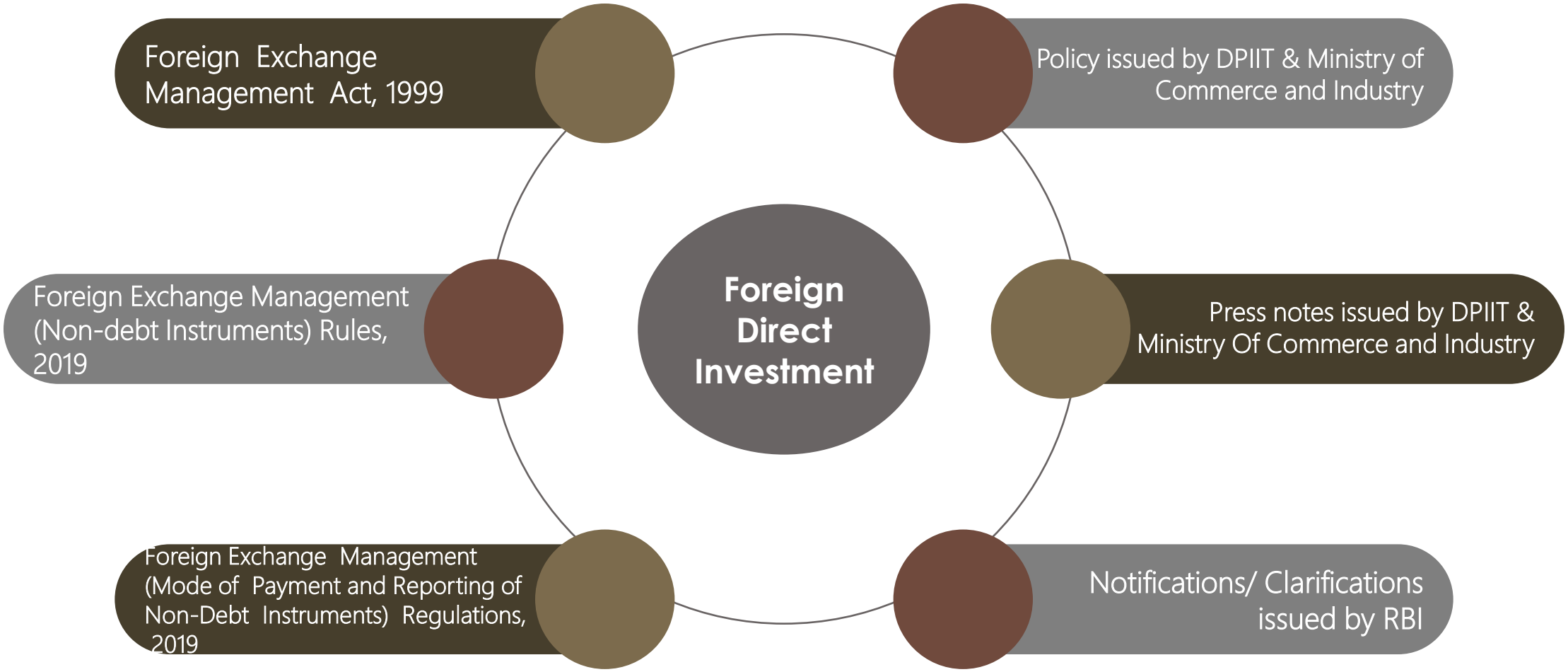
$$corr(x, y) = \frac{Cov(x, y)}{s_x s_y}$$

Valuation Examination Syllabus

Reserve Bank of India and Regulations under Foreign Exchange Management Act, 1999:

- FEMA (Transfer or Issue of Security by a Person Resident Outside India), Regulations, 2017;
- Foreign Direct Investment (Pricing Guidelines);
- Direct Investment by Residents in Joint Venture/ Wholly Owned Subsidiary abroad;
- Prudential Norms for Classification, Valuation and
- Operation of Investment Portfolio by Banks; Guidelines on Sale of Stressed Assets by Banks

Legislation



FEM NON-DEBT INSTRUMENTS RULES, 2019

- Schedule I: Purchase or sale of equity instruments of an Indian company by a person resident outside India (FDI)
- Schedule II: Investments by Foreign Portfolio Investors
- Schedule III: Investments by Non-Resident Indian (NRI) or Overseas Citizen of India (OCI) on repatriation basis
- Schedule IV: Investment by NRI or OCI on non-repatriation basis
- Schedule V: Investment by other non-resident investors
- Schedule VI: Investment in a Limited Liability Partnership (LLP)
- Schedule VII: Investment by a Foreign Venture Capital Investor (FVCI)
- Schedule VIII: Investment by a person resident outside India in an Investment Vehicle
- Schedule IX: Investment in Depository Receipts by a person resident outside India
- Schedule X: Issue of Indian Depository Receipts

FOREIGN INVESTMENT IN INDIAN COMPANIES

FOREIGN DIRECT INVESTMENT

- All investments in unlisted company
- Investments in listed companies > 10%
- Continuation of FDI status in case of dilution of stake below 10% on further capital raise

Fully diluted capital base to be considered

FOREIGN PORTFOLIO INVESTMENT

- Investments in listed companies < 10% (in aggregate for group entities)
- Investment in unlisted certain securities also permitted (NCD)
- 10% limit in relation to each series of capital instruments

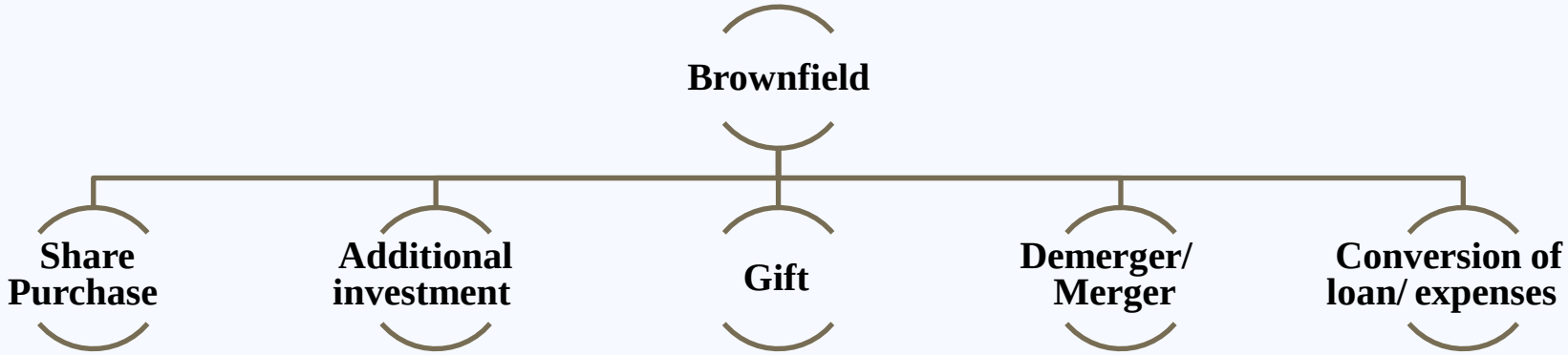
Foreign Investment into an Indian Company

Kinds of Investment

- Automatic Route – no prior approval from the RBI/ Government
- Approval Route – prior approval of the RBI/ Government required (no separate RBI approval)

Mode of Investment

- Greenfield: Setting up a new JV/ WOS (fresh issue of shares/ ADR/ GDR)
- Brownfield: Relating to existing investments/ business activities



Investment from Restricted Investors

- Government of India issued Press Note 3 on April 17, 2020 with an aim to curb opportunistic takeovers/ acquisitions of Indian companies due to the COVID-19 situation
- It was followed up with a notification amending Schedule I to the NDI Rules covering FDI only with effect from April 22, 2020
- Prior Government Approval is required in respect of foreign direct investment (including transfer of shares, directly or indirectly) emanating from:
  - Entities which are based in countries sharing land borders with India; or
  - Entities whose beneficial owners of investments are situated in such countries or is a citizen of such country which shares land border with India
- Countries covered within this restriction are **China, Pakistan, Nepal, Bangladesh, Myanmar, Bhutan and Afghanistan**
- Hong Kong, and Macau should also be covered as Restricted Countries, given these areas are under the Chinese administration
- Meaning of 'Beneficial Owner':
  - (a) Having a controlling interest in the entity (i.e. 10%, 25% etc. of the shares/ voting power of the entity); or
  - (b) In a position to exercise control i.e. right to appoint majority of board members of the entity, etc.
  - Various bankers have been interpreting the Beneficial Owner threshold as 10% or 26%

Sectors where FDI is prohibited

- Lottery business including Government/ private lottery, online lotteries
- Gambling & betting including casinos
- Business of chit fund
- Nidhi company
- Trading in Transferable Development Rights (TDRs)
- Manufacturing of cigars, cheroots, cigarillos & cigarettes, of tobacco or of tobacco substitutes
- Activities/ sectors not opened to private sector investment including atomic energy
- Real Estate or Construction of Farm Houses

Explanation: "Real Estate Business" shall not include development of township, construction of residential/commercial premises, roads or bridges & REISs registered & regulated under the SEBI (REITs) Regulations 2014.

Eligible Investee Entities

- Indian Companies
- Partnership Firm/ Proprietary Concern
- Trusts
- Limited Liability Partnerships (LLPs)
- Investment Vehicle
- Startup Companies
- Other Entities

FDI in LLP

- FDI in LLP allowed under the automatic route in sectors where 100% FDI is allowed under automatic route for companies and there are no FDI- linked performance conditions (minimum cap, lock-in, etc.)
- **Indian companies** having FDI are permitted to make downstream investment in LLPs
  - Only if both the Indian company and the LLP operate where 100% FDI is permitted under automatic route and no FDI-linked conditions attached
- LLPs with FDI are also eligible to make downstream investments in India
- Conversion of an LLP having foreign investment into a company is permitted under automatic route. Similarly conversion of company into LLP is permitted under automatic route.

ODI by an Indian LLP

- Overseas investment by an Indian LLP permitted
- Indian LLPs with FDI can make investments in overseas companies

ECB by LLP

- LLPs can not raise foreign currency loan (ECB) as per FAQ

FDI in Partnership Firm/ Proprietary concern

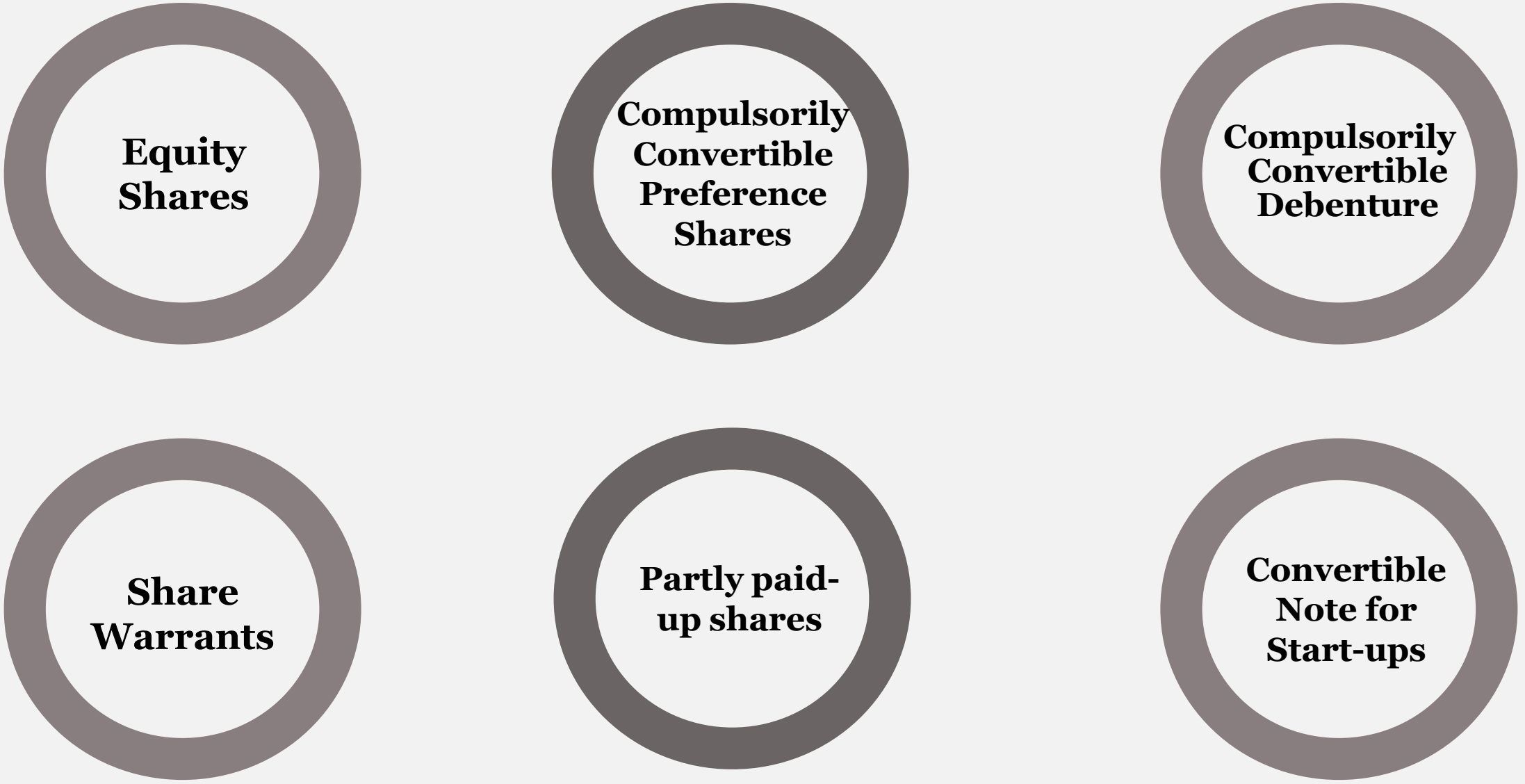
A Non-Resident Indian (NRI) or a Person of Indian Origin (PIO) can invest in the capital of the from or a proprietary concern in India on non-repatriation basis provided:

- The amount invested shall not be eligible for repatriation outside India
- The firm or proprietary concern is not engaged in any agriculture/plantation or real estate business or print media sector.
- Amount invested by inward remittance or out of NRE/ FCNR(B)/NRO account.

Investment with repatriation option is allowed with prior permission of Reserve Bank of India. The application will be decided in consultation with Government of India.

Investment by Non-Residents other than NRI or PIO has to seek prior approval of RBI.

Foreign Investment – Capital Instruments



Equity Shares

- Simplest mode for funding and no end use restrictions
- Pricing guidelines applicable
- Valuation to be undertaken as per internationally accepted valuation methodology
- Allotment of shares pertaining to the Subscribed Capital as per MoA can be carried out at face
- value, which can be in excess of minimum capital requirement

Rights Issue

- Should be in compliance with Companies Act,2013
- Shall not breach security cap applicable to the company
- Allotment of shares on assignment of rights entitlement to a NR shall comply with pricing guidelines
- In case of Listed Company, right issue shall be at a price determined by the company
- In case of Unlisted Company, allotment price to NR $\geq$ R
- Unsubscribed portion of Rights Issue can be subscribed by NR on same terms

Bonus Issue

- Pricing guidelines not applicable

Compulsorily Convertible Preference Shares

- Preference Shares have preferential right over Equity Shares, in terms of:
  - Repayment of capital on winding-up of the company
  - Payment of dividend
- Preference Shares have to be compulsorily redeemed/ converted within 20 years
- Only fully and mandatorily Convertible Preference Shares are construed as part of equity and considered as FDI
- All other forms of preference shares construed on par with ECB
- Maximum dividend cap SBI PLR + 3% has been done away with
- No end use restrictions
- Conversion price or conversion formula to be fixed upfront
- Conversion price under conversion formula should be in compliance with pricing guidelines
- Conversion price > Current Fair Value
- Variable conversion ratio – Conversion price at the lower end (maximum shares allotted) > Current Fair Value
- No reporting on conversion

Compulsorily Convertible Debentures

- Only Fully and Mandatorily Convertible Debentures are construed as part of equity and considered as FDI
- All other forms of debentures construed on par with External Commercial Borrowings
- No time limit for conversion prescribed
- Interest payment to comply with Indian transfer pricing regulations
- Interest deductible in hands of the company – Lower cost of capital
- Interest income would be taxable in the hands of debenture holders as per IT Act or DTAA
- Interest payment to non-residents – taxes to be withheld
- No end use restrictions

Convertible Notes

- Convertible Notes can be issued by Indian Startup for an amount of INR 25 lacs rupees or more in a single tranche
- Registration of the start-up with the Department of Industrial Policy and Promotion required
- Key eligibility conditions for qualifying as a start-up:
  - Turnover shall not have exceeded INR 100 crore during any of the financial years
  - Not more than 10 years should have elapsed from the date of incorporation
  - Entity should not have been formed by splitting up or reconstruction a business already in existence
  - Should be working towards innovation, development or improvement of products or processes or services, or should be a scalable business model with a high potential of employment generation or wealth creation
- Registration process is fairly simple and can be completed online
- Option to convert Convertible Notes into equity shares
- Convertible Notes to be repaid or converted into equity shares within five years
- Period of holding of equity shares allotted on conversion to commence from the date of conversion
- No end use restrictions on Convertible Notes proceeds

Issue of Partly Paid Shares and Warrants

Partly paid equity shares

- Partly paid shares FDI compliant
- Pricing to be determined upfront
- 25% of consideration to be paid upfront (balance within 12 months)
- Can be received after 12 months, if issue size > 500 Cr and appoint monitoring agency in line with the ICDR regulations

Warrants

- Warrants now FDI compliant
- Pricing of warrants and price/conversion formula to be determined upfront
- 25% of consideration to be paid upfront (balance within 18 months)
- Price for conversion not to be lower than fair value at the time of issuance of warrants
  - Investee company can receive more than pre-determined price

Issue of Shares under Employees Stock Option Scheme

ESOPS

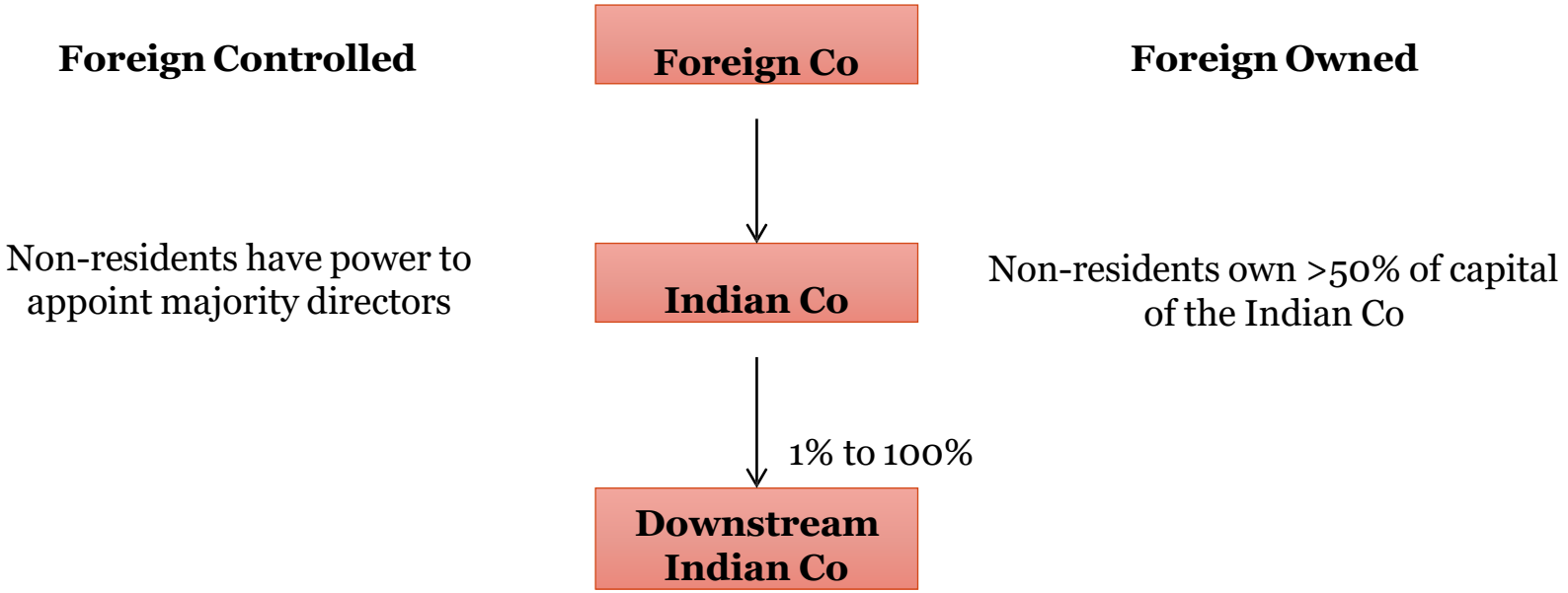
- Employee, Directors of Company/ Holding Company /Joint Venture /Wholly Owned Subsidiary are eligible;
- Scheme should be as per Companies Act 2013 and SEBI;
- Adherence of Sectoral cap;
- Issuance by Company under approval route shall require prior approval;
- GOI approval for issuance of shares to citizen of countries sharing land border with India;
- Person who was resident at the time of grant of shares shall hold the share on non-repatriation basis.

Downstream Investment

Downstream Investment

Downstream investment shall mean investment made by an Indian entity or an Investment vehicle in the capital instruments or the capital of another Indian entity.

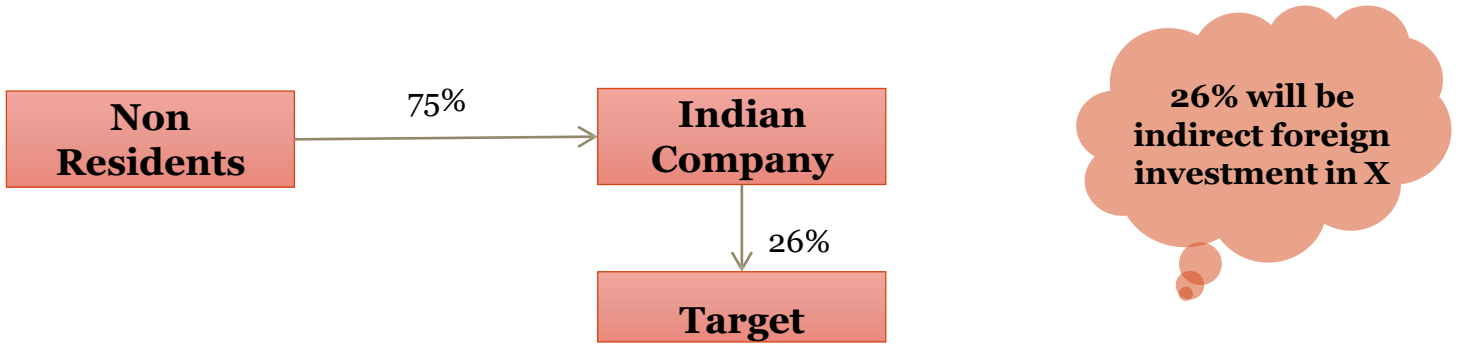
Indirect Foreign Investment means downstream investment received by an Indian entity from another Indian Entity which has received Foreign Investment & is the Indian Entity is owned or controlled by another resident outside India



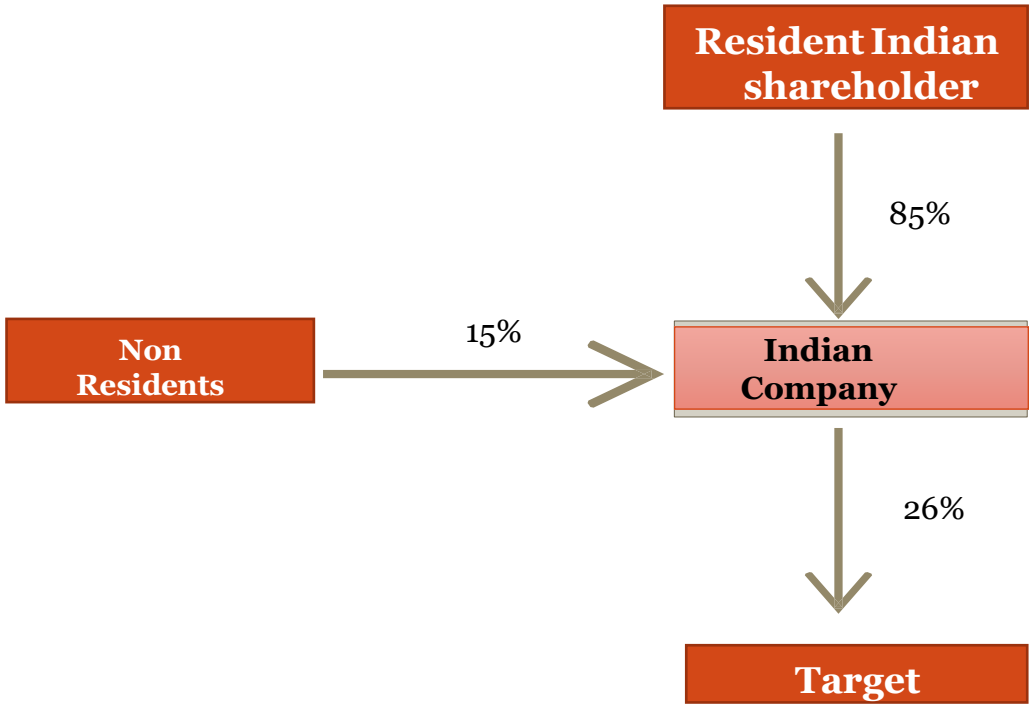
Downstream Investment

- Total Investment means **Direct + Indirect**
  - Direct – All investments held directly by Non Resident entity
  - Indirect
- **<u>Calculation of Indirect foreign investment</u>**

  In case the investing Indian company is **owned or controlled by 'non resident entities'**, the entire investment by such company into the target would be considered as indirect foreign investment.

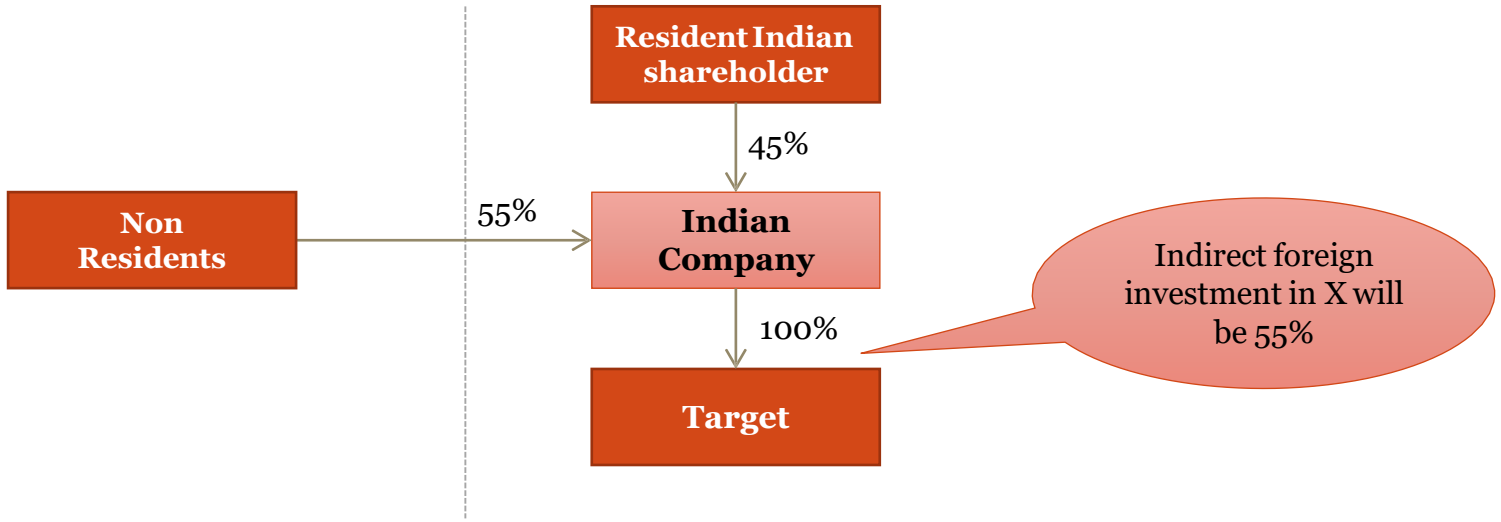


Downstream Investment



Downstream Investment

Indirect foreign investment in 100% owned subsidiaries of an investing Indian company, will be limited to the foreign investment in such Indian company



Downstream Investment

Conditions:

- The downstream investment should have the approval of the Board of Directors
- For the purpose of downstream investment, the Indian entity making the downstream investment shall ring in requisite funds from abroad and not use funds borrowed in the domestic markets.
- But downstream investments can be made through internal accruals i.e. profit transferred to reserve account after payment of taxes.
- The first level Indian company making downstream investment shall be responsible for ensuring compliance with the provisions of these regulations

Reporting Requirements

S. No	Type of Forms	Reporting Requirement
1	Advance Remittance Form (ARF)	An Indian company which has received amount of consideration for issue of capital instruments shall report in ARF to the Regional Office concerned of the RBI not later than 30 days from the date of receipt.
2	Form Foreign Exchange Currency-Gross Provisional Return (FC-GPR)	An Indian company issuing capital instruments shall report such issue in Form FC-GPR to the Regional Office of the RBI not later than 30 days from the date of issue.
3	Form Foreign Currency- Transfer of Shares (FC-TRS)	Form FC-TRS shall be filed for transfer of capital instruments.
4	Annual Return on Foreign Liabilities & Assets (FLA)	An Indian company or LLP which has received FDI by way of capital contribution should submit Form FLA to the Reserve Bank or on before 15th of each year

Foreign Direct Investment (Pricing Guidelines)

Pricing Guidelines

Issue of capital Instruments

- Listed Company: In accordance with the relevant SEBI guidelines
- Unlisted Company: As per Internationally accepted pricing methodology on an arm's length basis duly certified by a Chartered Accountant, Merchant Banker or Cost Accountant.

Transfer from Person resident in India to Person resident outside India

- Listed Company: In accordance with SEBI guidelines
- Unlisted Company: As per Internationally accepted pricing methodology on an arm's length basis duly certified by a Chartered Accountant, Merchant Banker or Cost Accountant.

Note: In case of transfer of capital instruments by a person resident outside India to a person resident in India, the guiding principle would be that person resident outside India is not guaranteed any assured exit price at the time of making such investment & shall exit at the price prevailing at the time of exit.

Where shares in an Indian company are issued to a person resident outside India in compliance with the provisions of the Companies Act, 2013, by way of subscription to Memorandum of Association, such investments shall be made at face value subject to entry route and sectoral caps.

Pricing Guidelines

Investment in LLP

Investment in an LLP either by way of capital contribution or by way of acquisition/ transfer of profit shares, should not be less than the fair price worked out as per any internationally acceptedand a valuation certificate to that effect should be issued by a Chartered Accountant or by a practicing Cost Accountant or by an approved valuer from the panel maintained by the Central Government.

Note: The pricing guidelines will not apply for investment in capital instruments on non-repatriation basis.

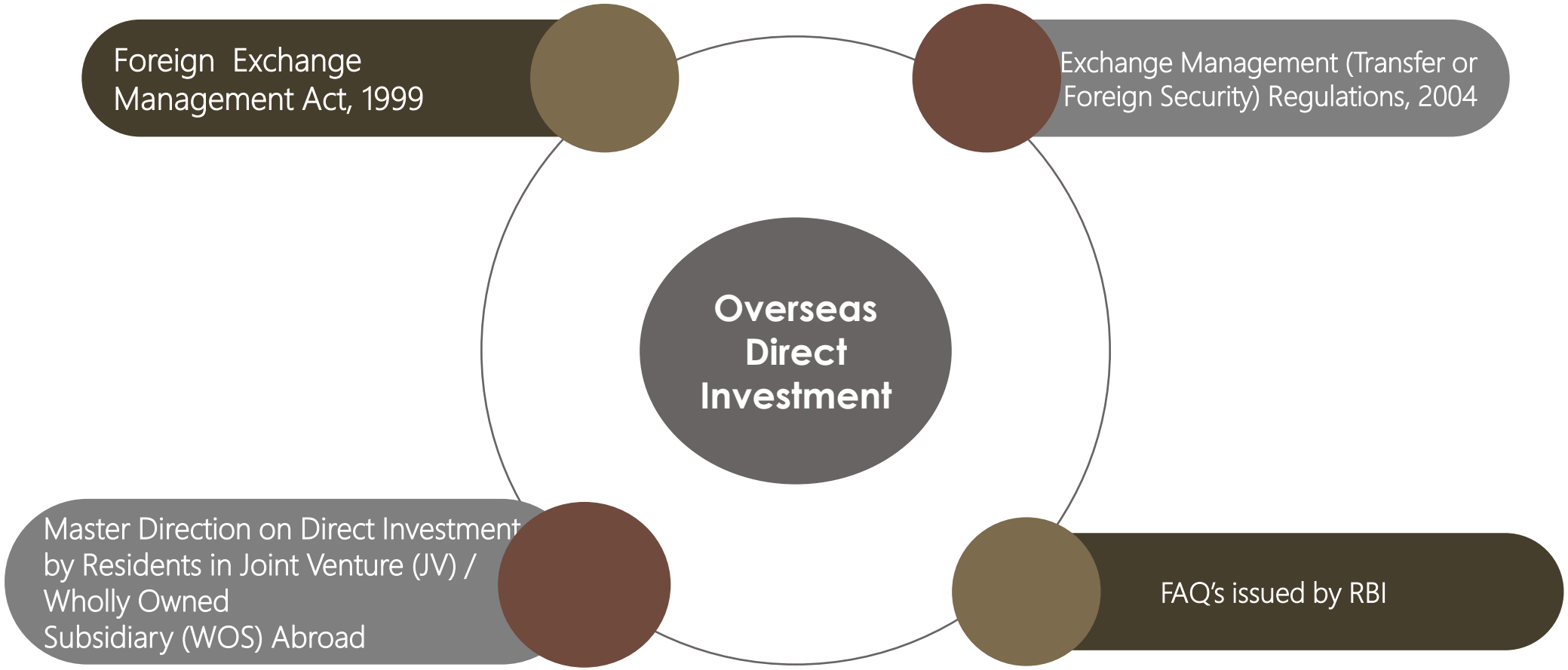
Q.18: What are the guidelines on valuation of capital instruments?

Answer: Please refer to regulation 11 of FEMA 20(R).

Particulars	Listed Company	Un-Listed Company
Issue by an Indian company or transferred from a resident to non-resident - **Price should not be less than**	The price worked out in accordance with the relevant SEBI guidelines	The fair value worked out as per any internationally accepted pricing methodology for valuation on an arm's length basis, duly certified by a Chartered Accountant or a SEBI registered Merchant Banker or a practicing Cost Accountant.
Transfer from a non-resident to resident - **Price should not be more than**	The price worked out in accordance with the relevant SEBI guidelines	The fair value as per any internationally accepted pricing methodology for valuation on an arm's length basis, duly certified by a Chartered Accountant or a SEBI registered Merchant Banker.

Overseas Direct Investment

Legislation

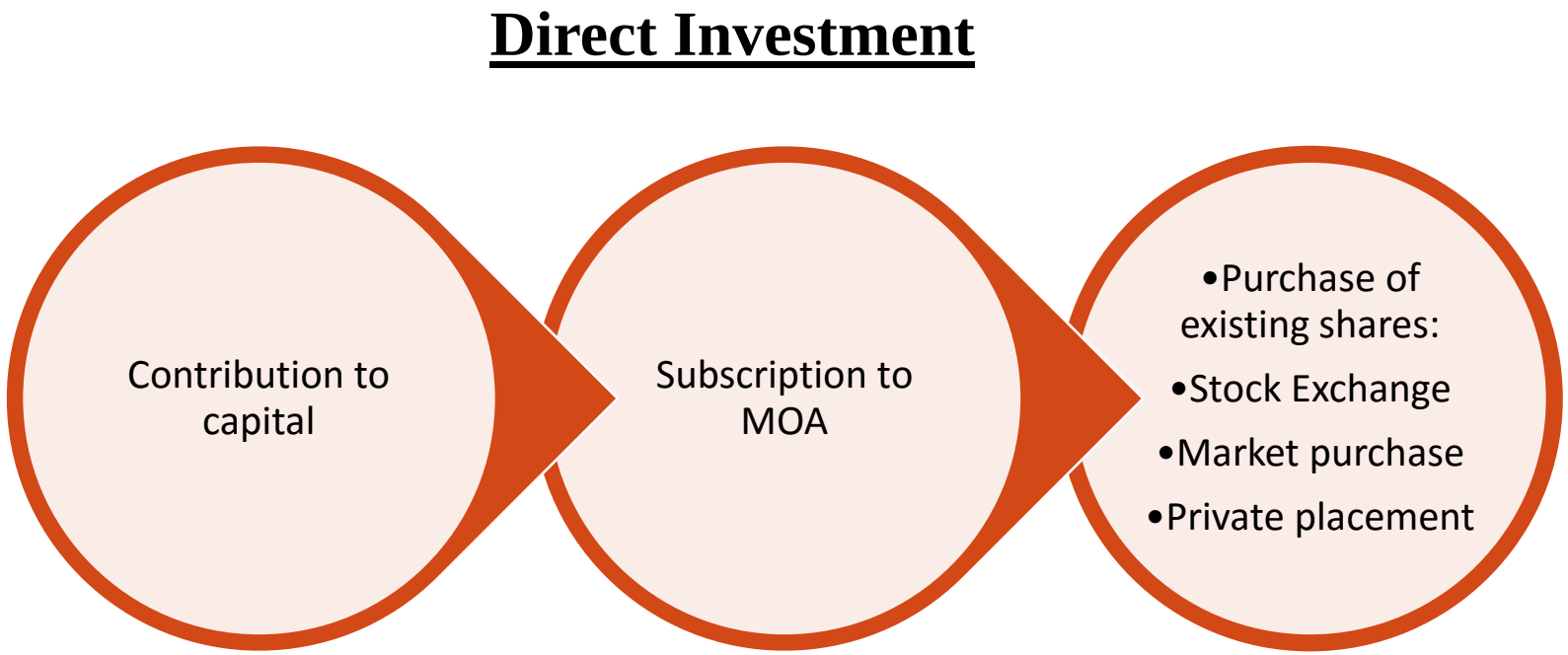


Eligible Investors

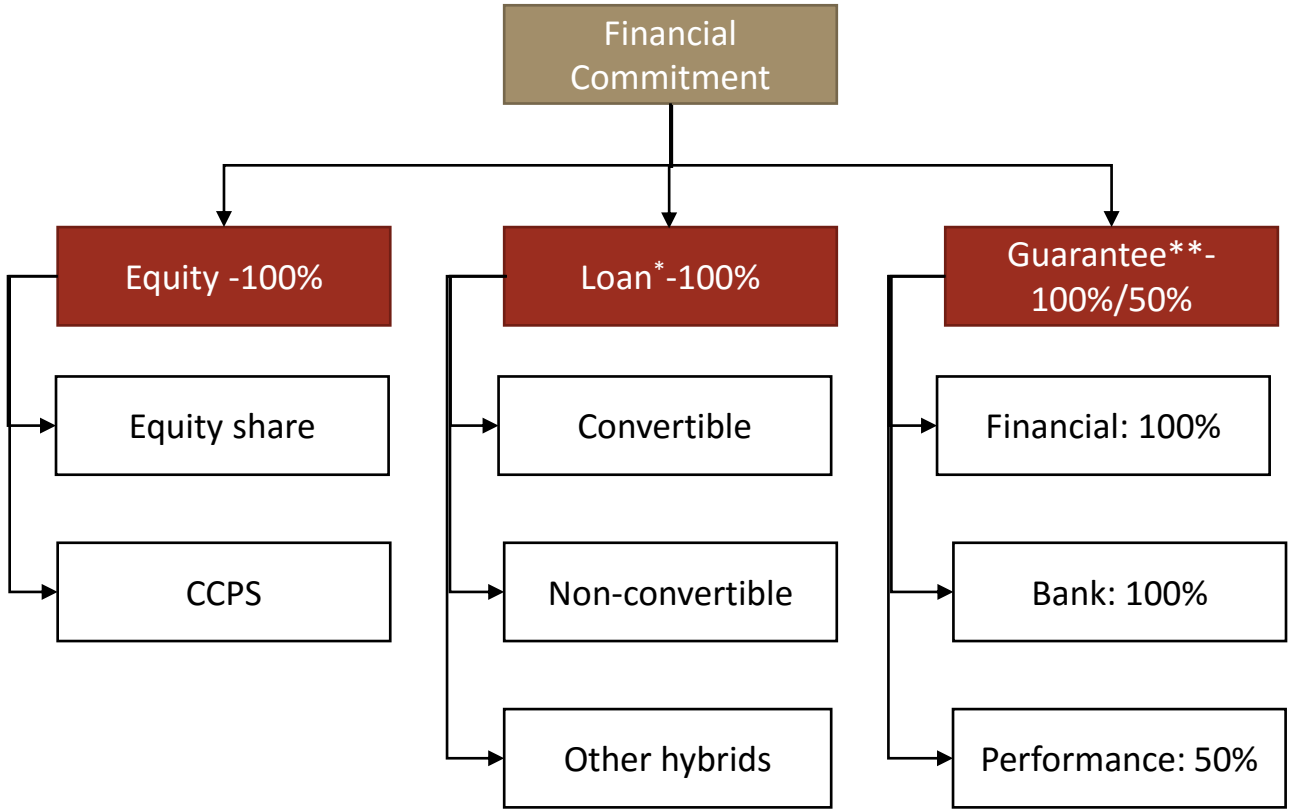
- Company
- Limited Liability Partnership (LLP)
- •Registered Partnership Firm
- •Resident Individual
- Partnership Firm/ Proprietary concern
- •Registered Trust & Society
- •Individuals

Eligible Investment

- Direct Investment
- Financial Commitment (Joint Ventures or Wholly Owned Subsidiary)



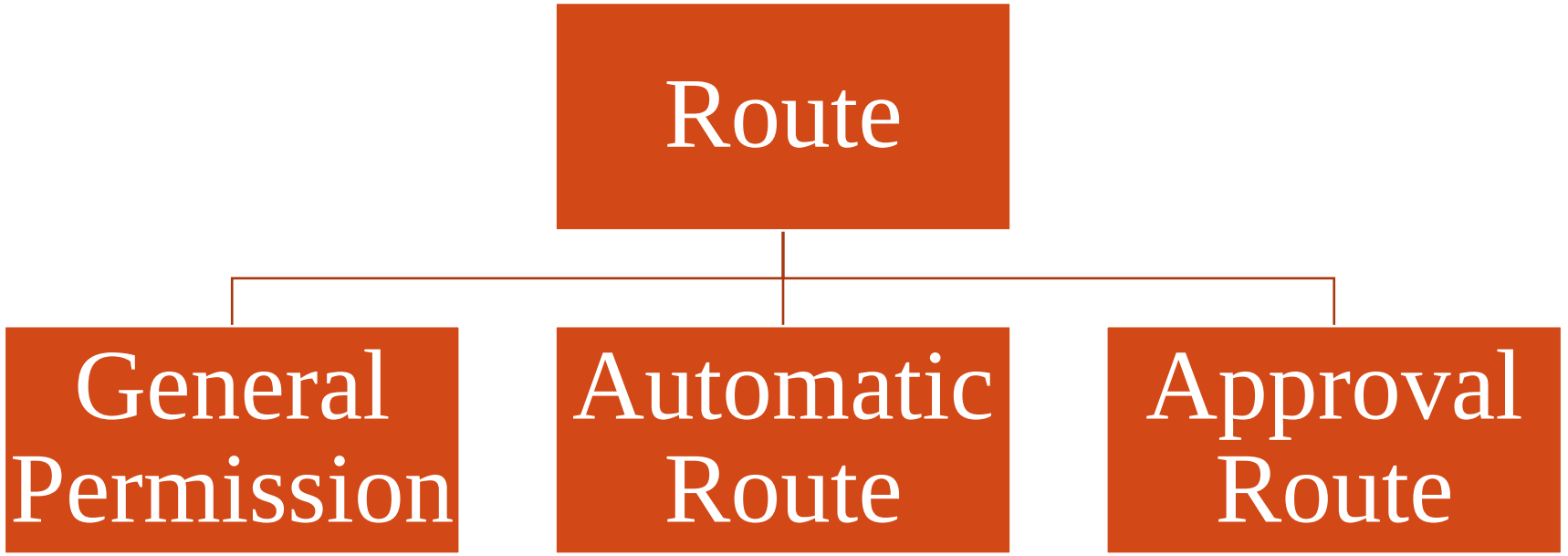
Financial Commitment



*Indian party may extend loan/guarantee only to overseas JV/WOS in which it has equity participation. Otherwise approval route.

**No guarantee should be “open ended” i.e. the amount & period of the guarantee should be specified upfront

Overseas Investment



- All transactions should be routed through 1 branch of AD
- Investment in Nepal permitted only in INR & in Bhutan both INR & FCC

Specified Sectors under approval route:

- **Real Estate**
  - 'Real estate business' means buying and selling of real estate or trading in TDRs but does not include development of townships, construction of residential/commercial premises, roads or bridges
- **Banking business**

Approval for investment in following countries:

- **Pakistan**

Financial Commitment

Indian party is permitted to make investment in Overseas JV or WOS, maximum of the following:

- 400% of the Net Worth as on the date of last audited balance sheet
- Balance held in Exchange Earners Foreign Currency Account (EEFC)
- Funds raised through ADRs or GDRs

Net Worth = Paid up capital plus free reserves

Total Financial Commitment = 100% Equity Shares + 100% CCPS + 100 PS + 100% Loan + 100% Guarantee + 100% Bank guarantee issued by resident bank on behalf of JV or WOS + 50% of the performance guarantee

Note: Financial commitment exceeding USD 1 Billion in Financial Year would require prior RBI permission (Even if total FC is within limits)

Method of Funding

- Drawl of Foreign Exchange from the AD bank in India
- Capitalization of exports
- Swap of Shares (Valuation by Category 1 Merchant Banker or an Investment Banker outside India)
- Utilisation of proceeds of ECB/FCCBs/FCEB
- In exchange of ADRs/GDRs
- Balance held in EEFC account
- Proceeds of foreign currency funds raised through ADR/GDR

➢ Valuation: Investment in **shares of existing company**

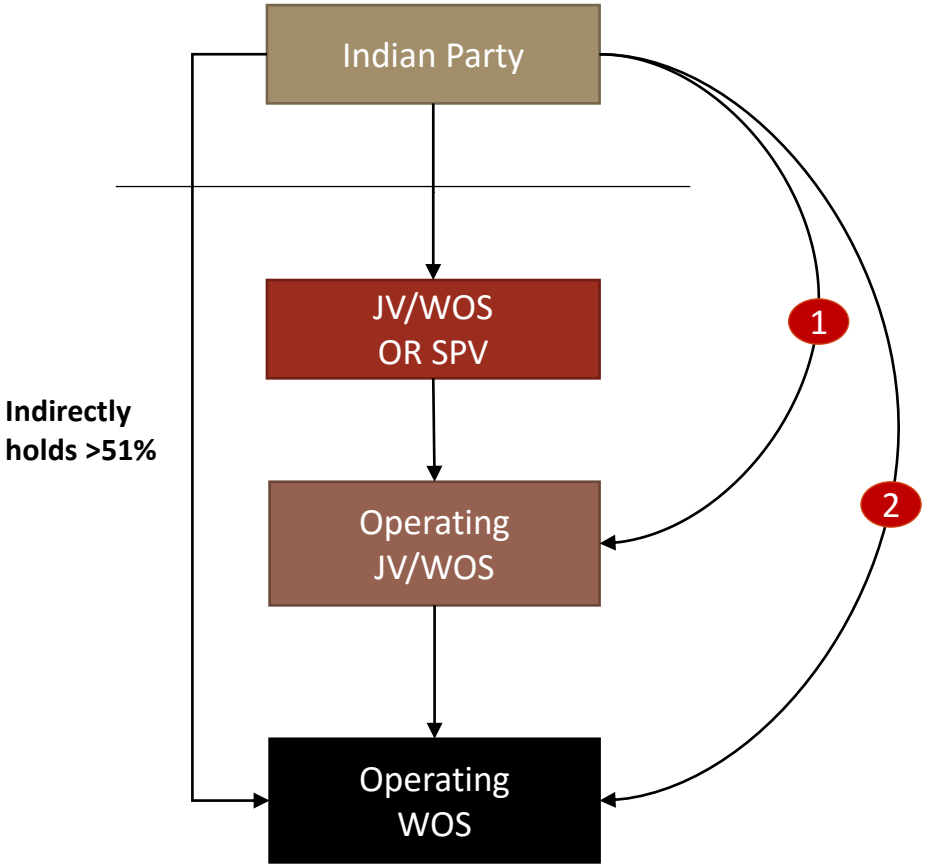
- > USD 5 Mn: SEBI regd. Category I Merchant Banker or Investment Banker/ Merchant Banker registered in country of ODI
- < USD 5 Mn: Valuation by CA/ CPA

➢ In case of **Swap of Shares** the valuation will have to be done by a Merchant Banker registered with SEBI or an Investment Banker/ Merchant Banker outside India registered with the appropriate regulatory authority in the host country

Guarantee to step down subsidiary

Corporate guarantee to step down subsidiary of JV/WOS:

- First level step down operating JV /WOS **under automatic route**
- Second level step down operating subsidiary provided Indian Party indirectly holds >=51% in such subsidiary **under the approval route**



Overseas Investments by Proprietary Concerns

Proprietorship and unregistered partnership firm are eligible for ODI under approval route.

Disinvestment without write off

Without prior approval the Indian party can disinvest subject to following conditions:

- The sale is effected through stock exchange (if listed)
- The shares price is not less than the value certified by CA or CPA based on latest audited financials (In case of unlisted)
- Indian party does not have any outstanding dues from the JV or WOS
- The overseas concern has been in operation for atleast 1 full year and the APR together with the audited accounts has been submitted to RBI.
- No pending investigation by CBI/ DoE/SEBI/ IRDA etc

In cases other than above, RBI approval required.

Reporting:

The Indian party is required to submit details of disinvestment within 30 days from the date of disinvestment.

Repatriation of sale proceeds to India within 90 days of sale

Disinvestment involving write off

Without prior approval the Indian party can disinvest involving write off in the following cases:

- Indian Listed Company
  - Net worth >= 100 crore
  - Net worth < 100 crore but ODI investment < USD 10mn
- Unlisted Company with ODI investment < USD 10mn

In cases other than above, RBI approval required.

Conditions:

- The sale is effected through stock exchange (if listed)
- The shares price is not less than the value certified by CA or CPA based on latest audited financials (In case of unlisted)
- Indian party does not have any outstanding dues from the JV or WOS
- The overseas concern has been in operation for atleast 1 full year and the APR together with the audited accounts has been submitted to RBI.
- No pending investigation by CBI/ DoE/SEBI/ IRDA etc

Reporting:

The Indian party is required to submit details of disinvestment within 30 days from the date of disinvestment.

Repatriation of sale proceeds to India within 90 days of sale

Restructuring involving write off

- Write off permitted for Indian promoters holding at least 51% stake in overseas JV/ WOS
- Write off of capital (Equity/preference shares) or other receivables such as loans, royalty, technical knowhow fees and management fees even while JW/WOS continues to function.
- **Maximum permissible write off limits:**

  Listed Indian company: up to 25% of equity investment in the JV/ WOS (under automatic route)

  Unlisted Indian company: up to 25% of equity investment in the JV/ WOS (under approval route)

Reporting:

The Indian party is required to submit details of disinvestment within 30 days from the date of write off/ restructuring with the copy of Balance Sheet of the overseas JV/ WOS showing loss & projection for the next 5 years years indicating benefit of write-off/ restructuring to India company

Obligation of Indian Investor

- **Proof:** Receive share certificate or any other document as an evidence of investment within 6 months
- **Dues:** Repatriate to India the dues receivable from foreign entity like dividend, royalty, technical fees etc. within 60 days of it falling due
- **Post Investment changes:** The details of of the set up subsidiary/ alter the shareholding patterns/ diversify the activities has to be intimated to RBI within 30 days of the approval.

Reporting Requirements

- Form ODI Part 1– Application for allotment of Unique Identification Number (UNI) & reporting of Remittances/ Transactions
- Form ODI Part 2 – Obligation to submit Annual Performance Report (APR) by 30th June every year
- Form ODI Part 3 – Report on Disinvestment

CLASSIFICATION OF INVESTMENT

Classification of Investment

- Held to Maturity
- Available for Sale
- Held for Trading

Held to Maturity

Banks should decide the category of the investment at the time of acquisition

- The securities acquired by the banks with the intention to hold them up to maturity will be classified under ‘Held to Maturity (HTM)’.
- Investments included under HTM category upto **25 per cent of their total investments** is allowed except:
  - The excess comprises only of SLR securities and
  - The total SLR securities held in the HTM category is not more than 22.0 per cent of their Demand and Time Liabilities (DTL) as on the last Friday of the second preceding fortnight.

Banks may hold the following securities under HTM:

SLR Securities upto the extent permitted.

Non-SLR securities included under HTM as on September 2, 2004.

Re-capitalisation bonds received from the Government of India towards their re-capitalisation requirement and held in Investment portfolio.

Investment in the equity of subsidiaries and joint ventures (a Joint Venture would be one in which the bank, along with its subsidiaries, holds more than 25 percent of the equity).

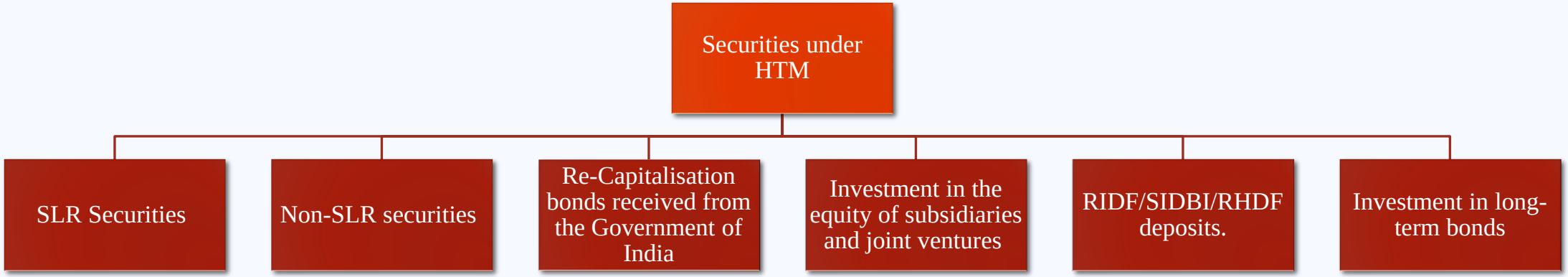
Held to Maturity

Banks should decide the category of the investment at the time of acquisition

- The securities acquired by the banks with the intention to hold them up to maturity will be classified under ‘Held to Maturity (HTM)’.
- Investments included under HTM category upto **25 per cent of their total investments** is allowed except:
  - The excess comprises only of SLR securities and
  - The total SLR securities held in the HTM category is not more than 22.0 per cent of their Demand and Time Liabilities (DTL) as on the last Friday of the second preceding fortnight.

- **Profit on sale** of investments in this category should be first taken to the Profit & Loss Account, and thereafter be appropriated to the ‘Capital Reserve Account’.
- **Loss on sale** will be recognised in the Profit & Loss Account.

Held to Maturity



Valuation of Held to Maturity Security

- Investment at the **Acquisition cost.**
- If acquisition cost more than FV, premium should be amortised over the period remaining to maturity.
- No need to be marked to market yearly.
- Situations where the impairment has to be made:
  - the company has defaulted in repayment of its debt obligations.
  - he loan amount of the company with any bank has been restructured.
  - the credit rating of the company has been downgraded to below investment grade.
  - the company has incurred losses for a continuous period of three years and the net worth has consequently been reduced by 25% or more.

In the case of impairment, the bank should obtain a valuation of the investment by a **reputed/qualified valuer** and make provision for the impairment.

Held for Trading

- The securities acquired by the banks with the intention to trade by taking advantage of the short-term price/interest rate movements will be classified under ‘Held for Trading (HFT).
- These securities are to be sold within 90 days.
- Profit or loss on sale of investments will be taken to the Profit & Loss Account.

Valuation

- It will be marked to market at monthly or at more frequent intervals

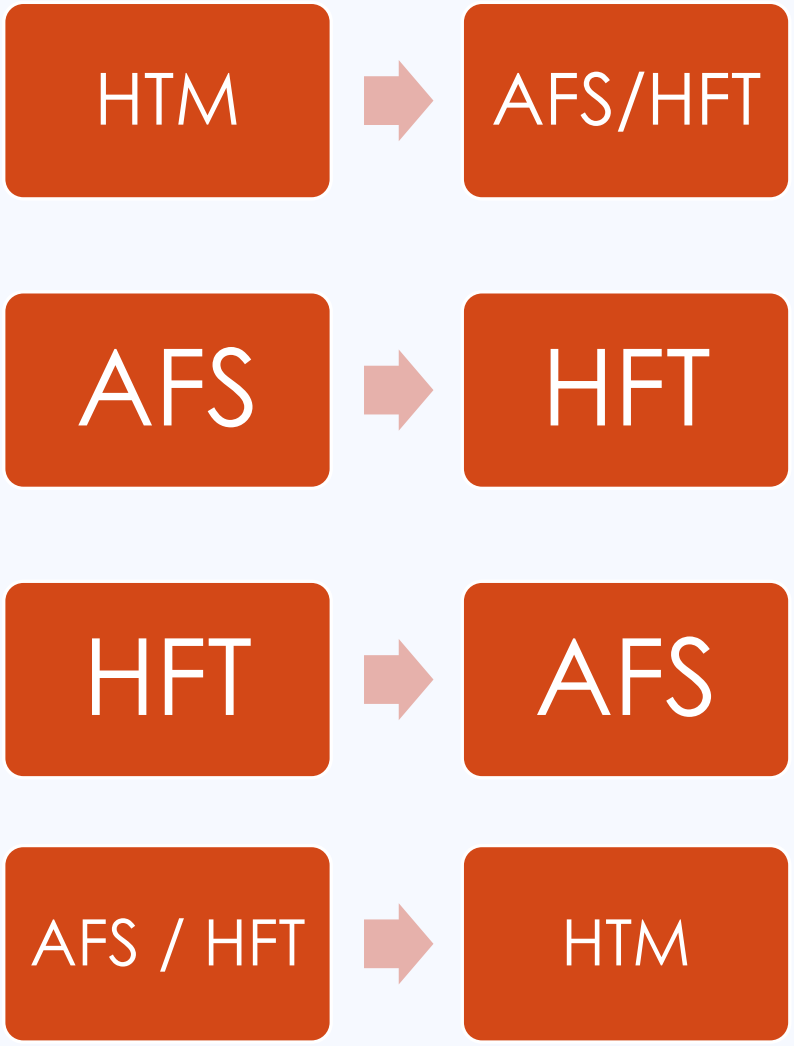
Available for Sale

- The securities which do not fall within the above two categories will be classified under ‘Available for Sale (AFS)
- Profit or loss on sale of investments will be taken to the Profit & Loss Account.

Valuation

- It will be marked to market at quarterly or at more frequent intervals

Shifting amongst Category



- Only with the approval of the Board of Directors & once in a year except when permitted by RBI.
- Only with the approval of their Board of Directors/ ALCO/ Investment Committee.
- Generally not allowed. Permitted only in exceptional circumstances
- The shares should be transferred at the lower of book value or market value.

Valuation

S.No	Investment	Valuation
1.	Debentures/ Bonds	Yield to Maturity (YTM)
2.	Zero coupon bonds	Carrying Cost i.e. acquisition cost plus discount accrued
3.	Preference Shares	Yield to Maturity (YTM)
4.	Equity Shares	**Listed:** Marked to market preferably on a daily basis **Unlisted:** Break up Value
5.	Mutual Funds Units	**Listed:** Stock Exchange quotations **Unlisted:** Latest re-purchase price
6.	Commercial Papers	Carrying Cost
7.	Securities issued by Securitisation Company (SC) / Reconstruction Company (RC)	**Lower** of: The redemption value or Net Book Value

Master Circular – Prudential Norms for Classification, Valuation and Operation of Investment Portfolio by Banks

Investment Policy

- Banks should frame Internal Investment Policy Guidelines and obtain the **Board's approval**.

Inclusion in Investment Policy:

- Primary Dealer (PD) : PD business undertaken by the bank will be limited to dealing, underwriting and market–making in Government Securities.

The following guidelines are to be kept in view by the banks:

(a) Banks may sell a government security already contracted for purchase
  (a) The purchase contract is confirmed prior to the sale
  (b) The purchase contract is guaranteed by Clearing Corporation of India Ltd. (CCIL)

(b) The settlement of all outright secondary market transactions in Government Securities is being done on a standardised T+1 basis but where at least one of the parties is an FPI, will be settled only on T+2 basis

(c) Banks desirous of making investment in equity shares/ debentures should observe the following guidelines:

- Build up adequate expertise in equity research
- Formulate a transparent policy
- The decision in regard to direct investment in shares, convertible bonds and debentures should be taken by the Investment Committee set up by the bank's Board.


STRIPS
Ready Forward Contracts in Government Securities
Transactions through Subsidiary General Ledger A/c
Engagement of brokers
Use of Bank Receipts
Retailing of Government Securities
Internal Control System
Audit, Review and Reporting of Investment Transactions

Separate Trading of Registered Interest and Principal Securities (STRIPS)

- Stripping is a process of converting periodic coupon payments of an existing Government Security into tradable zero-coupon securities, which will usually trade in the market at a discount and are redeemed at face value
- Reconstitution is the reverse process of stripping

Ready Forward Contracts in Government Securities

Ready forward contracts may be undertaken only in:

(i) Dated Securities and Treasury Bills issued by Government of India and

(ii) Dated Securities issued by State Governments.

Ready Forward contracts can be entered into only by:

- Persons or entities maintaining a Subsidiary General Ledger (**SGL**) account with RBI, Mumbai
- maintain gilt accounts (i.e gilt account holders) with a bank or any other entity (i.e. the custodian) permitted by the Reserve Bank to maintain Constituent Subsidiary General Ledger (CSGL) account with its PDO, Mumbai

- All ready forward contracts shall be reported on the Negotiated Dealing System (NDS)
- All ready forward contracts shall be settled through the SGL Account/CSGL Account maintained with the RBI
- Securities purchased under the ready forward contracts shall not be sold during the period of the contract except by entities permitted to undertake short selling.
- Re-repo is permitted in government securities, including state development loans and Treasury Bills, acquired under reverse repo

Transactions through SGL account

Following instructions should be followed by banks for **purchase / sale of securities through SGL A/c**, under the Delivery Versus Payment System wherein the transfer of securities **takes place simultaneously** with the transfer of funds **(No overdraft facility).**

- All transactions in Government Securities for which SGL facility is available should be put through SGL account only.
- Under no circumstances, a SGL transfer form issued by a bank in favour of another bank should bounce for want of sufficient balance of securities otherwise the (selling) bank which has issued the form will be liable to the following penal action against it at a rate of **3 percentage points above** the SBI Discount and Finance House of India's (SBIDFHI) call money lending rate
- The SGL transfer form received by purchasing banks should be deposited in their SGL account immediately, i.e., the date of lodgment of the SGL Form with the Reserve Bank shall be within one working day after the date of signing of the Transfer Form.
- The amount of the SGL form (cost of purchase paid by the purchaser of the security) would be debited immediately to the current account of the selling bank with the Reserve Bank.

Use of Bank Receipt (BR)

The banks should follow the following instructions for issue of BRs:

- No BR should be issued under any circumstances in respect of transactions in Government Securities for which SGL facility is available.
- BR may be issued for ready transactions only, under the following circumstances:
  - The scrips are yet to be issued by the issuer and the bank is holding the allotment advice
  - The security is physically held at a different centre
  - The security has been lodged for transfer / interest payment

- No BR should remain outstanding for more than 15 days otherwise the BR should be deemed as dishonoured
- BR should be redeemed only by actual delivery of scrips

Internal Control System

The banks' managements should ensure that there are adequate internal control and audit procedures for ensuring proper compliance of the instructions in regard to the conduct of the investment portfolio

- There should be a clear functional separation of (i) trading, (ii) settlement, monitoring and control and (iii) accounting.
- All SGL/CSGL account holders should adhere to the FIMMDA code of conduct while executing trades on NDS-OM and in the OTC market
- Banks are required to report OTC trades in Commercial Papers (CPs) and Certificate of Deposits (CDs) and OTC repo trades in corporate debt securities
- In case of investment in shares, the surveillance and monitoring of investment should be done by the Audit Committee of the Board
- The internal audit department should audit the transactions in securities on an ongoing basis

Engagement of brokers

For engagement of brokers to deal in investment transactions, the banks should observe the following guidelines:

- Transactions between one bank and another bank i.e. intra bank should not be put through the brokers' accounts.
- If a deal is put through with the help of a broker, the role of the broker should be restricted to that of bringing the two parties to the deal together & the broker is not obliged to disclose the identity of the counterparty to the deal.
- Banks should prepare a panel of approved brokers which should be reviewed annually or more often if so warranted.
- A limit of 5% of total transactions through brokers (both purchase and sales) entered into by a bank during a year should be treated as the aggregate upper contract limit for each of the approved brokers.
- The concurrent auditors who audit the treasury operations should scrutinise the business done through brokers also

Audit, review and reporting of investment transactions

- Banks should undertake a half-yearly review (as of March 31 and September 30) of their investment portfolio, which should, apart from other operational aspects of investment portfolio
- A copy of the review report put up to the Bank's Board should be forwarded to the Reserve Bank (concerned Regional Office of DBS, RBI) by May 15 and November 15 respectively.
- Treasury transactions should be separately subjected to concurrent audit by internal auditors and the results of their audit should be placed before the CMD of the bank once every month.

INVESTMENT IN NON-SLR SECURITIES

Guidelines

- Banks may henceforth make investments only in those securities which adhere to the **SEBI regulations** with respect to the disclosure norms for issue of debt securities
- Banks should not invest in Non-SLR securities of original maturity of **less than one-year**, other than Commercial Paper and Certificates of Deposits and NCDs which are covered under RBI guidelines.
- Banks should undertake usual due diligence in respect of investments in non-SLR securities
- Banks must not invest in **unrated** non-SLR securities except companies engaged in infrastructure activities but within the ceiling of 10 per cent for unlisted non-SLR.
- Bank's investment in **unlisted** non-SLR securities should not exceed 10 per cent of its total investment in non-SLR securities as on March 31, of the previous year except investment in Securitisation papers issued for infrastructure projects, and bonds/debentures issued by Securitisation Companies (SCs) and Reconstruction Companies (RCs). If the bank breaches the limit then the bank **would not** be allowed to make further investment in non-SLR securities .

LIMITS ON BANKS' EXPOSURE TO CAPITAL MARKETS

- The aggregate exposure of a bank to the capital markets in all forms (both fund based and non-fund based) **should not exceed 40 per cent** of its net worth as on March 31 of the previous year.
- Within this overall ceiling, the bank's direct investment in shares, convertible bonds/ debentures, units of equity-oriented mutual funds and all exposures to Venture Capital Funds (VCFs) [both registered and unregistered] should not exceed **20 per cent of its net worth**.

A bank's Board of Directors is free to adopt a lower ceiling for the bank, keeping in view its overall risk profile and corporate strategy.

INVESTMENTS IN LONG TERM BONDS ISSUED BY BANKS FOR FINANCING OF INFRASTRUCTURE AND AFFORDABLE HOUSING

- An investing bank's investment in a specific issue of such bonds will be capped at 2% of the investing bank's Tier 1 Capital or 5% of the issue size, whichever is lower.
- An investing bank's aggregate holding in such bonds will be capped at 10% of its total Non-SLR investments.
- Not more than 20% of the primary issue size of such bond issuance can be allotted to banks.
- Banks cannot hold their own bonds.

GUIDELINES ON SALE OF STRESSED ASSETS BY BANKS

Policy on Sale of Stressed Assets

Banks shall recognise incipient stress in loan accounts, immediately on default, by classifying such assets as **Special Mention Accounts (SMA)**

SMA Sub-categories	Basis for classification – Principal or interest payment or any other amount wholly or partly overdue between
SMA-0	1-30 days
SMA-1	31-60 days
SMA-2	61-90 days

Banks shall report credit information, including classification of an account as SMA to Central Repository of Information on Large Credits (**CRILC**), on all borrowers having aggregate exposure of **₹ 50 million** and above with them.

Policy on Sale of Stressed Assets

Following Important points to be considered:

- Identification of stressed assets for sale shall be top-down
- **Once in a year**, the board shall identify and list internally the specific financial assets identified for sale
- All assets under **"Doubtful Assets"** should be reviewed by the board/board committee on periodic basis
- Prospective buyers can be SCs/RCs or other banks/NBFCs/FIs
- Minimum time to be given for due diligence to the prospective buyer of the assets is **2 weeks**
- The value of stressed assets can be **internal or external**. However, in case of exposures beyond Rs.50 crore, banks shall obtain 2 external valuation reports

The threshold for the investment by banks in Security Receipts backed by stressed assets sold by it, to be eligible for progressive provisioning is **10%.**

Thank you

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