

Debt Market & How to select the right Debt Fund?

Winners Rotate

2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Gold 24.00	Gold 29.00	Mid-cap 38.52	International 29.60	Small-cap 62.91	Credit risk 10.00	G-sec 15.00	Small-cap 59.64	Gold 8.00	International 27.31
Large-cap 17.43	Real estate 17.72	Small-cap 36.45	Large-cap 8.98	Mid-cap 54.69	Corporate bond 9.00	Corporate bond 12.00	Mid-cap 48.13	G-sec 8.00	Gold 18.00
Small-cap 16.69	Credit risk 8.00	Large-cap 25.70	Real estate 7.46	Large-cap 29.89	Mid-cap 7.43	Credit risk 12.00	Large-cap 27.91	Large-cap 5.91	Large-cap 12.65
Mid-cap 16.15	Corporate bond 8.00	Real estate 17.07	Credit risk 7.00	G-sec 17.00	G-sec 7.00	Gold 11.00	International 19.42	Corporate bond 5.00	G-sec 12.00
International 12.78	T-Bill 4.61	International 13.40	Corporate bond 6.00	Credit risk 14.00	Small-cap 6.10	Real estate 9.63	Credit risk 8.00	Credit risk 5.00	Corporate bond 10.00
Corporate bond 7.00	G-sec 4.00	G-sec 13.00	T-Bill bond 5.50	Corporate bond 13.00	T-Bill 5.38	International 9.54	Corporate bond 7.00	Real estate 4.83	Credit risk 8.00
Credit risk 6.00	International 0.00	Gold 12.00	G-sec 2.00	Real estate 11.91	Real estate 4.52	Mid-cap 7.97	Real estate 6.40	T-Bill 4.08	T-Bill 4.20
Real estate 5.50	Large-cap -24.64	Credit risk 11.00	Mid-cap -5.73	International 11.39	International -0.73	T-Bill 4.73	Gold 6.00	International -6.24	Real estate 2.60
G-sec 4.00	Mid-cap -34.19	Corporate bond 11.00	Small-cap -9.67	T-Bill 5.72	Large-cap -5.03	Large-cap 1.95	T-Bill 4.03	Mid-cap -13.38	Mid-cap -4.01
T-Bill 3.00	Small-cap -36.41	T-Bill 5.59	Gold -18.00	Gold 2.00	Gold -8.00	Small-cap 1.77	G-sec 2.00	Small-cap -23.53	Small-cap -8.98

Winners Rotate

Strategies	CAGR
Chasing the winner - Investing in the last years best asset class	5.38%
Investing in the last years worst performing asset class	6.53%
Equal weight asset allocation	8.17%

This data is between 1993 - 2019

Divergent – Risk & Return

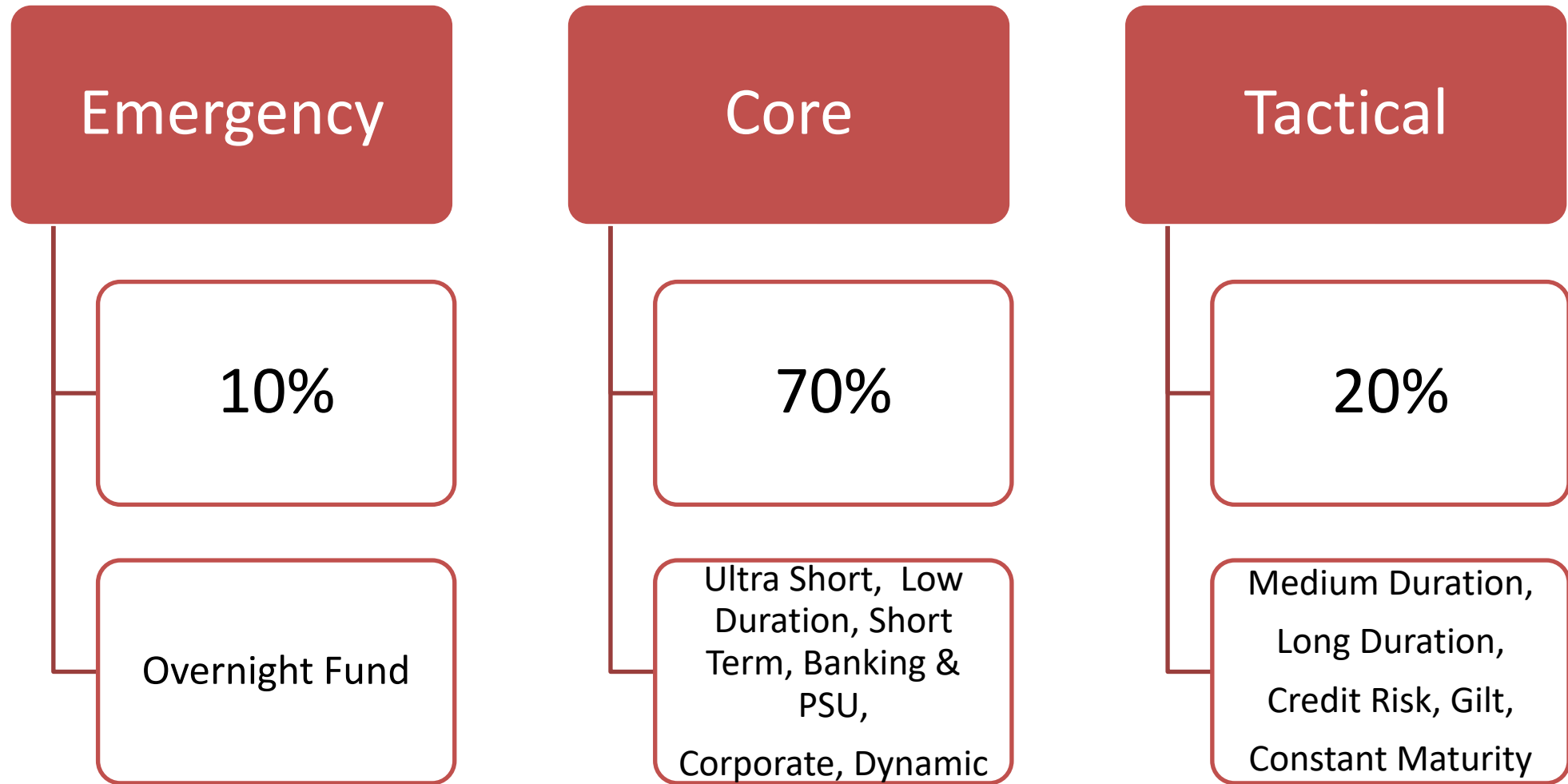
Measures	100% Debt	80% Debt- 20% Equity	50% Debt - 50% Equity	30% Debt - 70% Equity	100% Equity
Average Return	6.7%	10%	14.9%	18%	18.5%
Standard Dev	4%	11%	18%	22%	26%
CPI - 6.09%					

This data is between 2003 - 2020

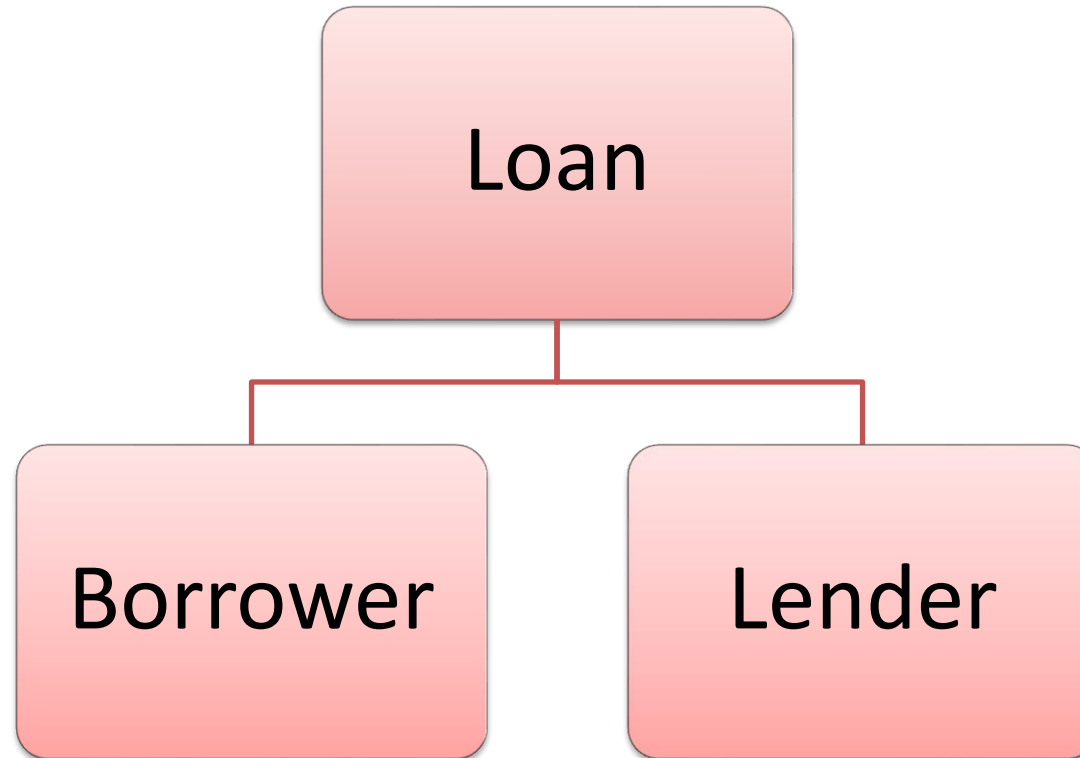
Sample Asset Allocation

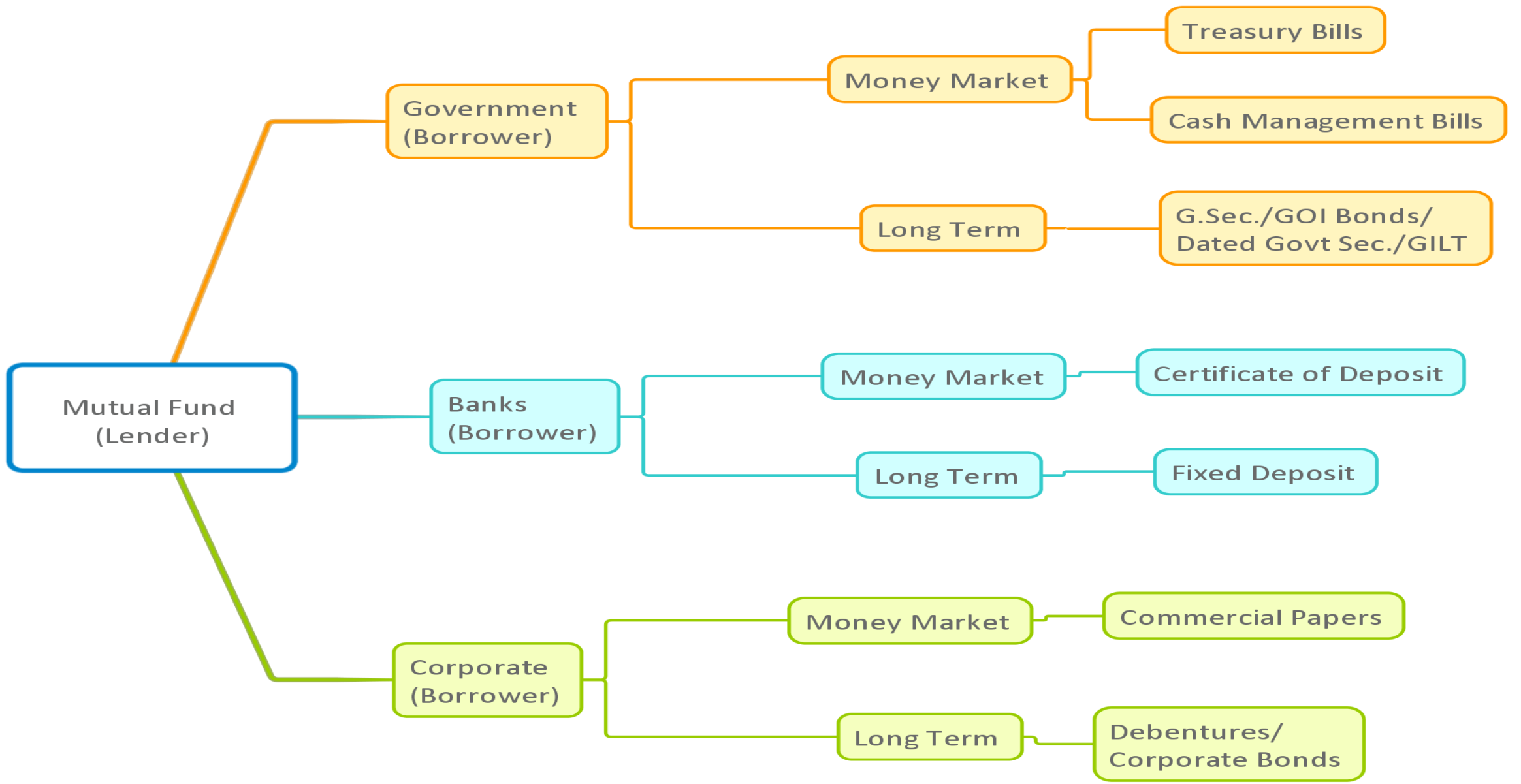
Risk Profile	Allocation
Aggressive	80% Equity - 20% Debt
Moderate	50% Equity - 50% Debt
Conservative	20% Equity - 80% Debt

Asset Allocation within Debt



What is Debt?





Types of Debt

Money Market Securities <= 1 yr maturity	Long Term Fixed Instruments > 1 yr maturity
Treasury Bill (T. Bills)	GOI Bonds
Cash Management Bill (CMB)	SDL
Certificate of Deposit (CD)	Certificate of Deposit
Commercial Paper (CP)	Debentures/Corporate Securities
Call Money	PTC
CBLO	

Treasury Bills

- ✓ Treasury Bills (T.Bills) are short term (up to one year) borrowing instruments of the Government of India which enable investors to park their short term surplus funds while reducing their market risk.
- ✓ T.Bill currently issued by Reserve Bank of India (RBI) are 91-day, 182-day and 364-day T-Bills.
- ✓ T.Bills are zero coupon securities and pay no interest. They are issued at a discount and redeemed at the face value at maturity.
- ✓ For example, a 91 day Treasury bill of Rs.100/- (face value) may be issued at say Rs. 98.20, that is, at a discount of say, Rs. 1.80 and would be redeemed at the face value of Rs.100/-. The return to the investors is the difference between the maturity value or the face value (that is Rs.100) and the issue price.

Cash Management Bills

- ✓ CMBs are non standard discounted instrument issued by the government to meet the temporary mismatches in the cash flow of the Government of India.
- ✓ CMB is the most flexible instrument of the government as it is issued only when needed
- ✓ The CMBs have the generic character of T-bills but are issued for maturities less than 91 days.

Certificate of Deposit

- ✓ Certificate of Deposit (CD) is a negotiable money market instrument and issued in dematerialised form or as a Promissory Note against funds deposited at a bank or other eligible financial institution for a specified time period.
- ✓ CDs can be issued by scheduled commercial banks {excluding Regional Rural Banks and Local Area Banks}; and select All-India Financial Institutions (FIs) that have been permitted by RBI to raise
- ✓ Minimum amount of a CD should be Rs.1 lakh, and in multiples of Rs. 1 lakh thereafter.
- ✓ The maturity period of CDs issued by banks should not be less than 7 days and not more than one year, from the date of issue. The FIs can issue CDs for a period not less than 1 year and not exceeding 3 years from the date of issue.
- ✓ CDs are like bank term deposits, but unlike traditional time deposits these are freely negotiable and are often referred to as Negotiable Certificates of Deposit.
- ✓ CDs are rated by approved rating agencies (e.g. CARE, ICRA, CRISIL, and FITCH) which considerably enhance their tradability in the secondary market, depending upon demand.

Commercial Papers

- ✓ Commercial Paper (CP) is an unsecured money market instrument issued in the form of a promissory note or in a dematerialised form through any of the depositories approved by and registered with SEBI.
- ✓ CP can be issued for maturities between a minimum of 15 days and a maximum upto one year from the date of issue. CP can be issued in denominations of Rs.5 lakh or multiples thereof. Amount invested by single investor should not be less than Rs.5 lakh (face value).
- ✓ Corporates, primary dealers (PDs) and satellite dealers (SDs), and the all-India financial institutions (FIs) that have been permitted to raise short-term resources under the umbrella limit fixed by Reserve Bank of India are eligible to issue CP.
- ✓ It is mandatory for CPs to be credit rated by approved Credit Rating Agencies as may be specified by RBI from time to time.

Call Money

- ✓ Call Money Market is an important segment of Indian Money Market.
- ✓ Call and notice money market refers to the market for short term funds ranging from overnight funds to funds for a maximum tenor of 14 days.
- ✓ **“Call money”**, funds are transacted on overnight basis
- ✓ **“Notice money”**, funds are transacted for the period of 2 days to 14 days.
- ✓ **“Term Money”** money is lent for fixed tenure for 15 days up to 1 year.
- ✓ **Participants:** Schedule Commercial Bank, Co-operative Banks (other than Land Development Banks), Payments Banks, Small Finance Banks and Primary Dealers.
- ✓ Banks borrow in this money market for the following purpose:
 - ✓ To meet their short term mismatches in funds
 - ✓ To meet the CRR & SLR mandatory requirements as stipulated by the RBI.
 - ✓ To meet sudden demand for funds arising out of large outflows.

CBLO

- ✓ **“Collateralized Borrowing and Lending Obligation (CBLO)”**, as the name implies facilitates in a collateralized environment, borrowing and lending of funds to market participants who are admitted as members in CBLO Segment.
- ✓ CBLO facilitates borrowing and lending from overnight up to a maximum of one year, in a fully collateralised environment.
- ✓ The type of entity eligible for CBLO Membership are Nationalized Banks, Private Banks, Foreign Banks, Co-operative Banks, Financial Institutions, Insurance Companies, Mutual Funds, Primary Dealers, Bank cum Primary Dealers, NBFC, Corporate, Provident/ Pension Funds etc. Entities who have been granted CBLO Membership are classified based on their NDS Membership.
- ✓ Eligible securities are Central Government securities including Treasury Bills as specified by CCIL from time to time.
- ✓ In Current times mutual funds use the word TREPS (Triparty Repo) instead of CBLO

GOI Bonds

- ✓ Government Security (G-Sec) is a tradeable instrument issued by the Central Government or the State Governments.
- ✓ Dated G-Secs are securities which carry a fixed or floating coupon (interest rate) which is paid on the face value, on half-yearly basis. Generally, the tenor of dated securities ranges from 5 years to 40 years.
- ✓ G-Secs carry practically no risk of default and, hence, are called risk-free gilt-edged instruments.
- ✓ The nomenclature of a typical dated fixed coupon G-Sec contains the following features - coupon, name of the issuer, maturity year. For example, **7.49% GOI BOND 2020**.

State Development Loans

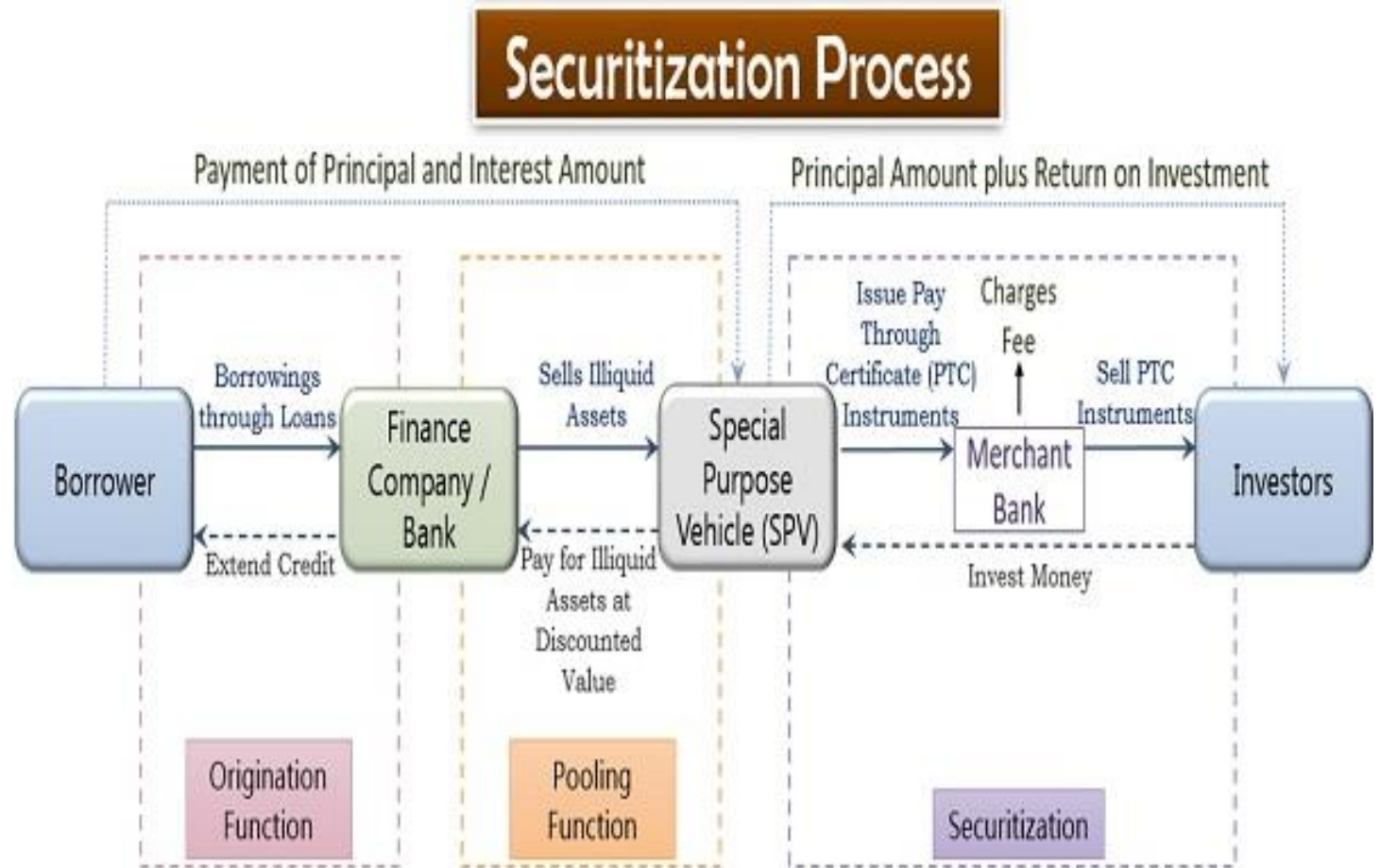
- ✓ State Development Loans (SDLs) are dated securities issued by states for meeting their market borrowings requirements.
- ✓ Purpose of issuing State Development Loans is to meet the budgetary needs of state governments. Each state can borrow upto a set limit through State Development Loans.
- ✓ RBI facilitates the issue of State Development Loans securities in the market.
- ✓ The RBI as the facilitator to the issue of SDLs, has the power to make repayments to SDLs out of the central government allocation to states.
- ✓ Interest is serviced at half-yearly intervals and the principal is repaid on the maturity date.
- ✓ The SDLs doesn't have any credit risk and in this respect, they are similar to central government securities.

Debentures

- ✓ Debentures are the debt instruments used to raise additional capital from the general public, usually backed by the integrity and the creditworthiness of the issuer.
- ✓ Interest is paid on time to time as decided by the issuer and principal is paid on maturity of Debenture.
- ✓ Debentures are Credit Rated by the Credit Rating Agency approved by SEBI from time to time.

Pass Through Certificate

Securitization is the method of converting the receivables of the financial institutions, i.e., loans and advances, into bonds which are then sold to the investors. In simple terms, it is the means of turning the illiquid assets into liquid assets to free up the blocked capital.





Liquidity Risk

- Liquidity risk Liquidity refers to the investor's ability to sell a bond quickly and at an efficient price, as reflected in the bid-ask spread.
- This is the risk that the entire bond market declines. If this happens, the price of your bond investments will likely fall regardless of the quality or type of bonds you hold. If you need to sell a bond before its maturity date, you may end up selling it for less than you paid for it

Default Risk

A general term for as the risk of Principal and/or interest amount not being paid as scheduled, which is technically termed “default risk.”

Credit Risk

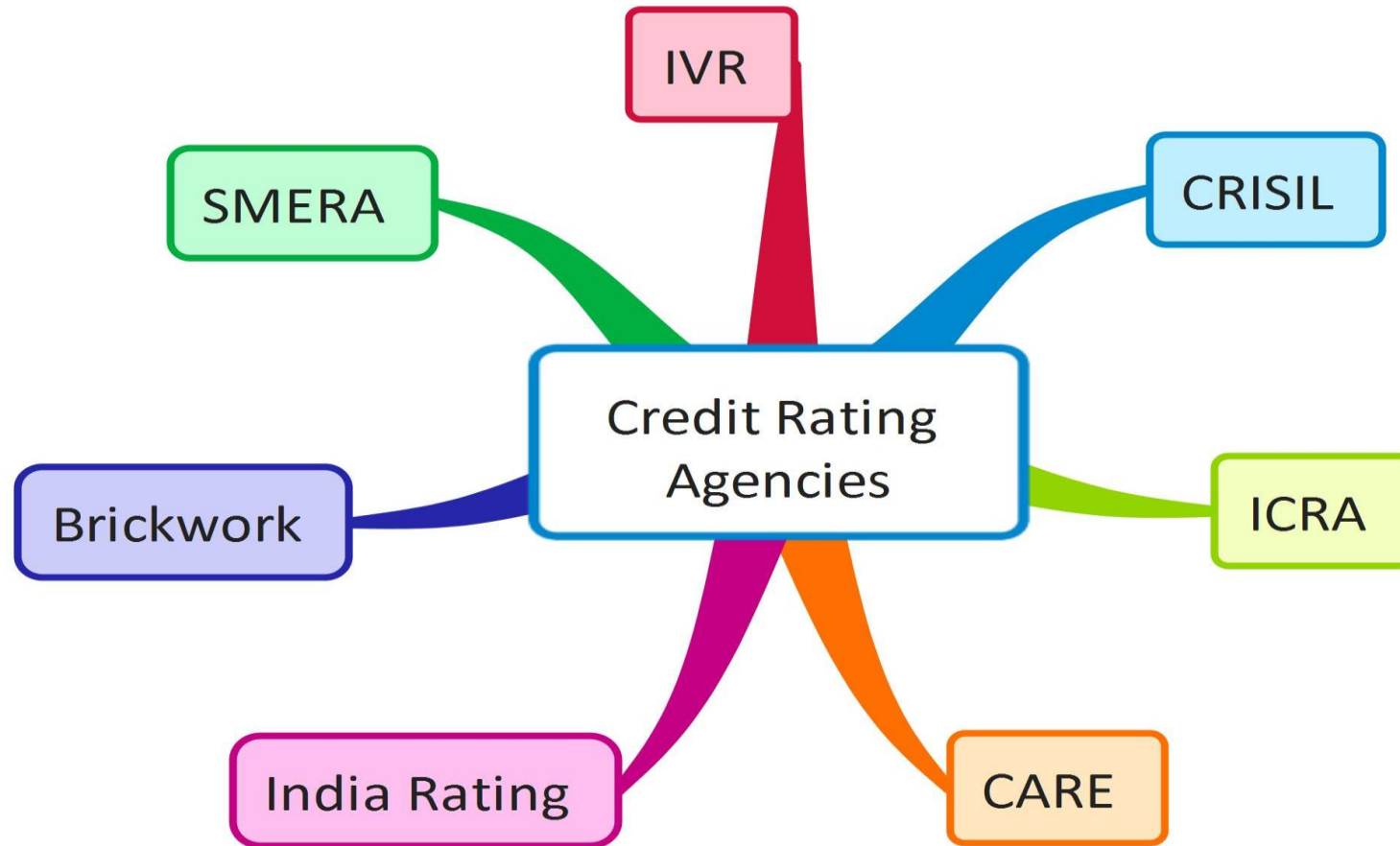
Credit risk is better termed “**Credit Rating Risk**” which is the risk that a bond gets its credit rating changed.

If a bond rating changes from AA to BB, then the bond’s yield will go up to compensate for the increased **perception** of default risk.

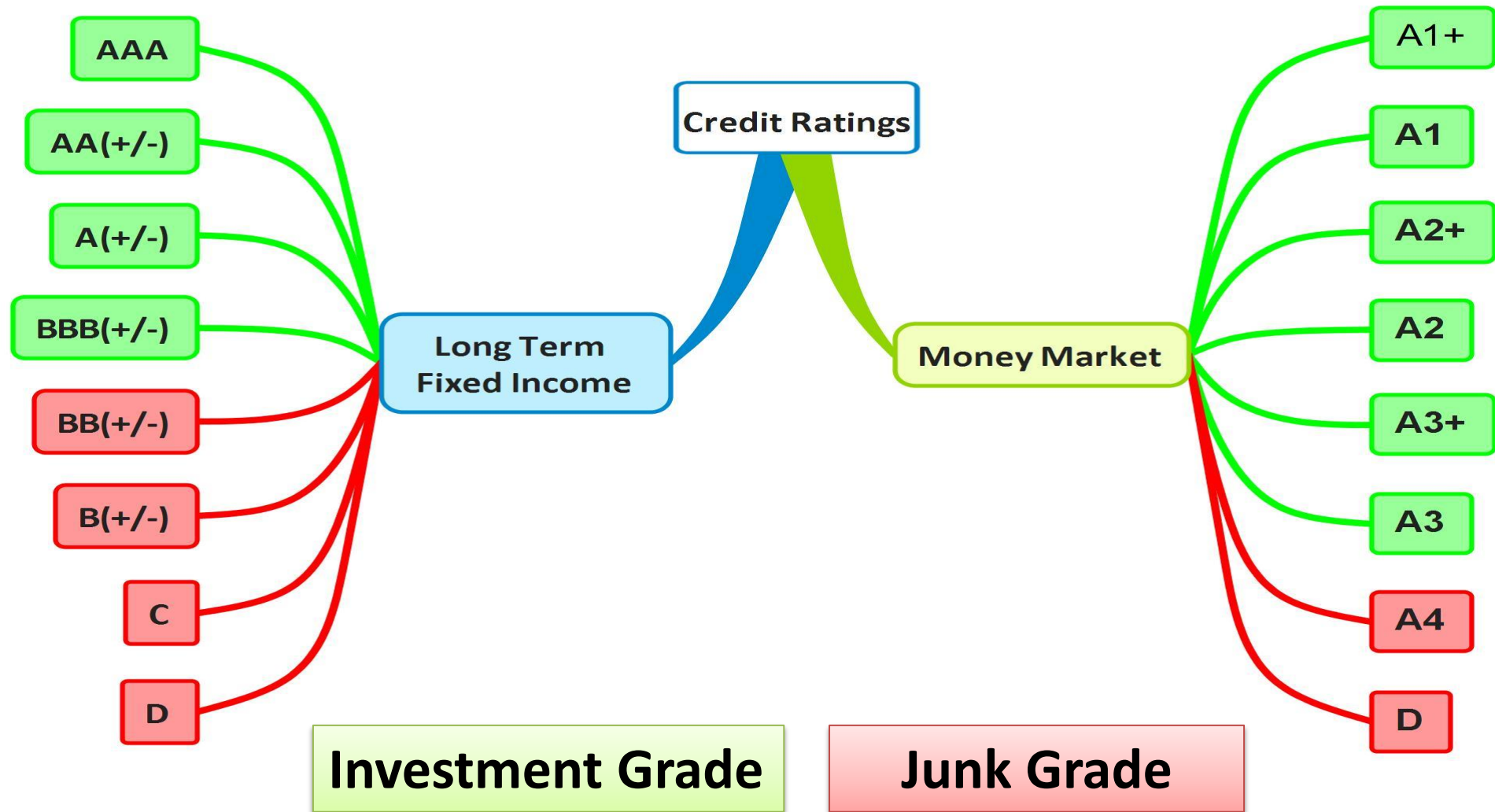
Credit Rating

- A credit rating may be defined as an opinion of a CRA as to the issuer's (i.e. borrower of money) capacity to meet its financial obligations to the depositor or bondholder (i.e. lender of money) on a particular issue or type of instrument (i.e. a domestic or foreign currency: short-term or medium or long-term, etc.) in a timely manner.

Credit Rating Agencies

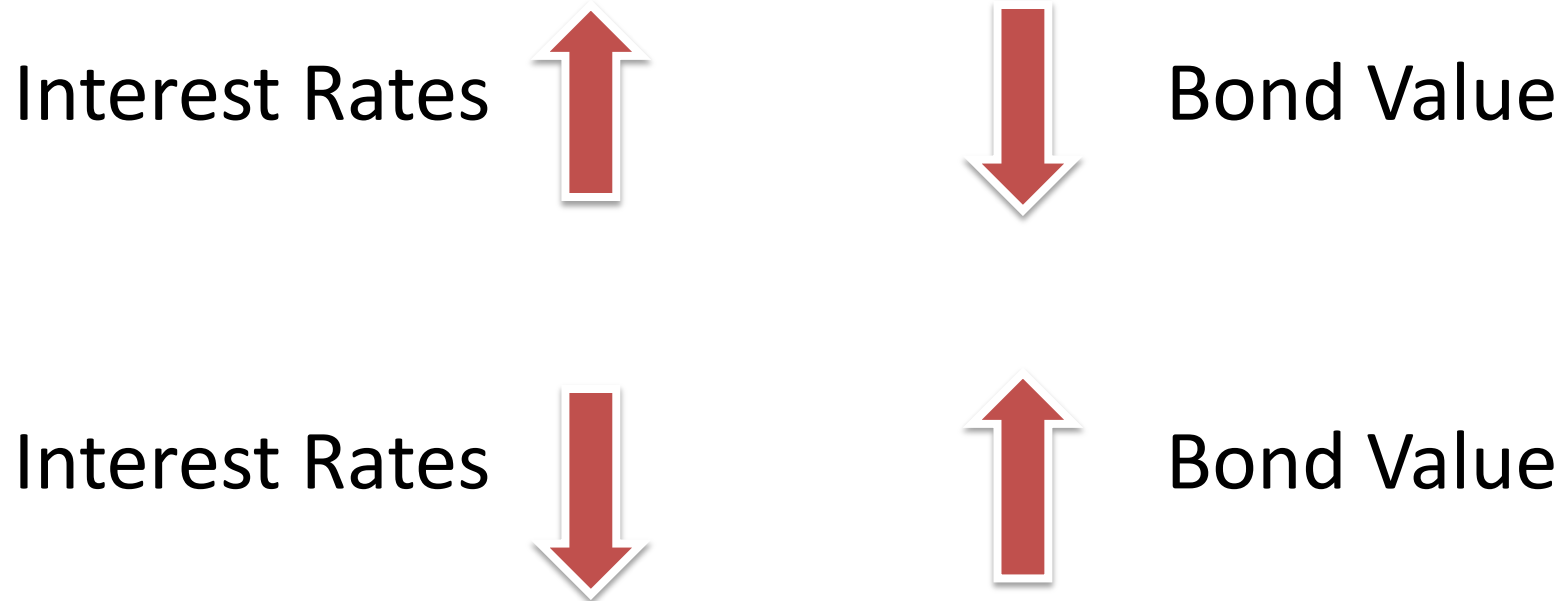


Credit Ratings



Effects of Interest Rates on Bond Prices

Bond Price is Inversely Proportional to Interest Rates



Modified Duration

- ✓ Its the sensitivity of the Bond Portfolio to the change in interest rate
- ✓ If the MD of the Bond Portfolio is 4, it means the portfolio will move 4% for every 1% movement in the interest rate
- ✓ If interest rate falls by 1%, the bond portfolio will generate 4% positive returns
- ✓ If the interest rate rises by 1%, the bond portfolio will generate 4% negative returns
- ✓ If the interest rate goes down by 0.5%, the bond portfolio will generate $4\% * 0.5 = 2\%$ positive returns and vice-versa

Fund Comparison

Lets assume a Debt Funds with the following data,

	Fund A	Fund B	Fund C
YTM	4.89%	8.33%	7.11%
Average Maturity	1.10 yrs	2.65 yrs	6.73 yrs
Modified Duration	0.99 yrs	2.07 yrs	4.87 yrs
Expense Ratio	1.05%	1.45%	1.22%

Situation,

1. Expecting Interest Rates to fall by 1%
2. Expecting Interest Rates to rise by 1%
3. No Interest Rate movement expected

Yield Spread

Yield spread is the difference in the yield between two bonds of the same maturity. Commonly, yield spread is the difference in the yield of any bond (PSU, corporate or banks) and Government bonds having the same maturity.

Debt Watch	6 Aug	Week Ago	Month Ago	Year Ago
Call Rate	3.50%	2.90%	2.90%	5.60%
Repo	4.00%	4.00%	4.00%	5.75%
10 Yr Gilt ^	5.87%	5.83%	5.84%	6.34%
91-D T Bill ^	3.26%	3.30%	3.17%	5.61%
182-D T Bill ^	3.34%	3.37%	3.37%	5.65%
364-D T Bill ^	3.45%	3.46%	3.40%	5.80%
1-mth CP rate	3.55%	3.55%	3.57%	5.85%
3-mth CP rate	3.75%	3.75%	4.13%	6.05%
6-mth CP rate	3.95%	4.04%	4.60%	6.95%
1 yr CP rate	4.65%	4.65%	5.35%	7.47%
1-mth CD rate	3.25%	3.35%	3.20%	5.53%
3-mth CD rate	3.35%	3.36%	3.35%	5.75%
6-mth CD rate	3.46%	3.51%	3.58%	6.20%
1 yr CD rate	3.95%	3.90%	3.95%	6.65%

Yields (%)	Gsec*	AAA	AA+	AA	AA-	A+
6 month	3.34	3.66	3.83	4.08	4.22	4.48
1 Year	3.59	4.15	4.34	4.63	4.78	5.02
3 Year	4.77	4.99	5.18	5.54	5.82	6.11
5 Year	5.04	5.45	5.72	6.08	6.37	6.76
10 Year	5.87	6.48	6.84	7.23	7.69	8.03

Step 1 - Macro Economics

Macro	What to do?
Interest Rates and/or Government borrowings are expected to go UP	Low/Short Duration Funds
Interest Rates and/or Government borrowings are expected to go DOWN	Medium/Long Duration Funds

Step 2 – Investment Goal

Match the investment horizon to the funds Average Maturity

Client Horizon	Category
Upto 1 month	Over Night
Upto 3 months	Liquid Fund
Upto 6-9 months	Ultra Short
Upto 1 years	Low Duration
Upto 3 years	Short Term
Upto 5 Years	Banking & PSU, Corporate Bond Fund

Category of Schemes	Scheme Characteristics
Overnight Fund	Maturity in 1 day
Liquid Funds	Maturity upto 91 days
Ultra Short Duration Fund	Duration between 3 – 6 months
Low Duration Fund	Duration between 6 – 12 months
Money Market Funds	Maturity upto 1 year
Short Duration Fund	Duration between 1 – 3 years
Medium Duration Fund	Duration between 3 – 4 years
Medium to Long Duration Fund	Duration between 4 – 7 years
Long Duration Fund	Duration greater than 7 years
Dynamic Bond	Across duration
Corporate Bond Fund	80% in highest rated corporate bond
Credit Risk Fund	65% in lower than highest rated
Banking & PSU Fund	80% in PSU
Gilt Funds	80% in G-Sec
Gilt Fund with 10 years constant duration	Duration equal to 10 years
Floater Fund	65% in floating rate bonds

Thank You



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