

FII

CERTIFICATE IN
FIXED-INCOME INVESTING

Session 6- Fixed Income Investing

Fixed Income Portfolio Management Concepts

Mark to Market (MTM) for Mutual Funds

- The value of any asset is the market value as on that date i.e. if it were sold (it doesn't matter whether you are actually selling or not), at what price it would have been valued.
- That part is easy. The difficult part is, an illiquid market.
- In equity market, or G-Secs market, there is adequate price discovery.
- In corporate bonds, particularly corporate bonds rated less than AAA, price discovery is infrequent.
- That leads to the question, how old a trade date can be considered for portfolio valuation as on a particular date.

Mark to Market (continued)

- For the Mutual Fund industry, SEBI has mandated CRISIL and ICRA valuation to be followed for daily NAV valuation.
- CRISIL and ICRA does MTM valuation for clients.
- It is done for every ISIN and not just a broad guidance on credit rating and maturity, which was the practice when FIMMDA used to issue the guidance.
- The basis for the valuation is market trades and interpolation / extrapolation from traded levels of securities of similar profile i.e. same credit rating, similar maturity and similar business / industry sector.

Accrual

- Since most of the returns in bonds come from interest accrual, rather than market movement in price of securities (which is the case in equities), that is of primary importance.
- Let us say, a bond has a coupon of 7.25%. Hence if NAV is valued every day, the daily accrual level is $7.25 / 365$ per Rs 100.
- Coupon pay-out may be once a year, but conceptually, that much coupon accrues every day. If the bond were to be sold in a wholesale secondary market deal, the accrued interest will be obtained.
- Market movements will add to / take away from the interest accrual.

Illustrations – Accrual and MTM

Lets say there is a severe negative market event and yield levels move up by 1% in one day.

The portfolio is a combination of securities of various maturities and the impact is as per market movement in papers of that maturity and credit rating.

Let us assume, for the sake of simplicity, the modified duration of the portfolio is 5 years and the impact is uniform on all securities in the portfolio.

Assumptions	
Fund YTM	7.25%
Expense	1.00%
Net YTM	6.25%
Fund Duration	5 years
Investment Rs	100
Market Movement	1%
NAV day 0	12.50

✓ You lose first, recover thereafter

1 day impact - day of event

Movement in Yield in Market	1.00%
Accrual	0.017
Mark to Market impact	5
Net Return	-4.98

NAV movement (growth option)

NAV day 0	12.50
NAV day 1	11.88

After severe negative movement of 1 day, probability of recovery is higher
Assumption: over the next 6 months, yield level comes down by 1%

6 month impact

Movement in Yield in Market	-1.00%
Accrual	3.125
Mark to Market impact	5
Net Return (absolute)	8.13

NAV movement (growth option)

NAV day 1	11.88
NAV after 6 months	12.89

✓ You gain first, lose partially thereafter

1 day impact - day of event

Movement in Yield in Market	-1.00%
Accrual	0.017
Mark to Market impact	-5
Net Return	5.02

NAV movement (growth option)

NAV day 0	12.50
NAV day 1	13.13

After severe positive movement of 1 day, probability of negative movement is higher
Assumption: over the next 6 months, yield level moves up by 0.5%

6 month impact

Movement in Yield in Market	0.50%
Accrual	3.125
Mark to Market impact	-2.5
Net Return (absolute)	0.63

NAV movement (growth option)

NAV day 1	13.13
NAV after 6 months	13.20

✓ Fund Management Strategies

- Duration
- Credit

Barbell

The portfolio maturity of a fund is the weighted average maturity of all the securities in the portfolio.

The maturity of the various securities in the portfolio may either be bunched around the 'declared' maturity of the fund or part of it may be in relatively longer and relatively shorter maturity papers.

The significance is, market movement in longer dated papers may be relatively higher than shorter maturity papers. The market movement may be favourable, may be adverse.

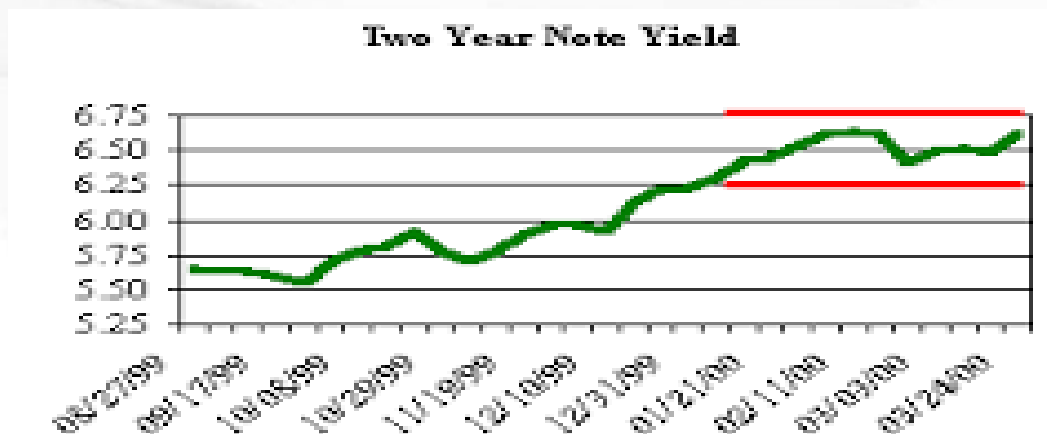
If a fund has a barbell strategy, it would gain more (or lose more) than a fund with bunched maturity, if market movement is more (favourable or adverse) in longer maturity papers.

▀ Mispricing on YieldCurve

Mis-pricing on the yield curve denotes a maturity spot somewhere in the yield curve, with a relatively higher yield than warranted by the trend on the curve.

Taking advantage of it denotes taking exposure to that maturity, subject to concentration norms.

The benefit is getting a relatively higher carry (YTM) and potential fall in interest rates.



Understanding Liquidity Management by MF Fund Manager

- We assume that liquidity in a Mutual Fund is just a redemption request away, as long as we take care of exit load (if any) of the fund, minimum horizon required and taxation aspects.
- While this is true, let us have some understanding of how the fund manager does his liquidity management to meet redemptions.
- The starting point of this discussion is that the underlying market of bonds is not liquid, but the fund manager carries the responsibility of honouring redemptions.
- Ways of doing it - 1

Every fund has a 'cash' component, which is liquid and is used to meet redemptions, if required.

This 'cash' component is parked in CBLO / TREPS, which is renewed / redeployed every day.

Understanding Liquidity Management by Fund Manager

- Ways of doing it - 2

Beyond the CBLO / TREPS component, there are certain relatively liquid securities which may be used to sell and meet redemptions if required. The liquid securities are:

- Money Market

T-Bills (relatively more liquid than Bank CDs and NBFC
CPs) Bank CDs (relatively more liquid than CPs)

- Bonds

AAA rated PSU bonds (relatively more liquid than pvt sector AAA Bonds)

AAA rated private sector bonds (relatively more liquid than AA Bonds)

To form a perspective on 'liquidity' in a fund, you may look at the cash equivalent /current assets (net of current liabilities), T-Bills, Bank CDs and AAA rated Bonds.

Understanding Liquidity Management by Fund Manager

- Ways of doing it - 3

Laddering of Maturities:

On the likely high redemption value periods, the fund manager would bunch up some maturities, so that those securities mature and the money is available in liquid form.

A typical example of laddered maturities is Liquid Funds and the advance tax outflow dates i.e. mid-June, mid-Sep, mid-Dec and mid-March.

- Ways of doing it - 4

Exit Load: exit load leads to lower corpus volatility. It ensures that that much corpus will remain for the exit load period and most of it even beyond the exit load period.

The AMC does an 'ageing analysis' to form a perspective on how much corpus remains for what period of time, on an average, and manage liquidity accordingly.

Understanding Liquidity Management by Fund Manager

- Ways of doing it - 5

Spreading the corpus base:

A retail investor base leads to corpus stability. An investor base of large corporates may lead to sudden redemption requests and the fund manager has to manage that liquidity.

They try to form an estimate through experience and interaction, on the likely redemption pressure.

SEBI's '20-25 rule' stipulates there should be minimum 20 investors in a scheme and maximum 25% of the fund can be from one investor.

However, in reality, a sudden 10% redemption is significant and has to be 'managed' by the fund manager.

Mitigating MTM Risk

MTM related volatility

- Any investment should be valued everyday or at a practicable frequency to reflect the true market value, in case it needs to be sold.
- Movements in the underlying market lead to NAV volatility. This is more in case of equity funds, but some volatility is there in case of debt funds also.
- Some fixed income oriented treasury investments have a mandate to minimize volatility in the portfolio.
- Mitigating MTM risk does not mean running away from a realistic NAV valuation, but managing the portfolio to optimize returns and volatility.
- This leads to living with a portfolio of low volatility while at the same time generating some alpha.

Fixed Maturity Plans

- As per rule, FMPs have to buy securities that mature on or before the maturity date of the product.
- It is permissible to shuffle securities, but the ‘maturity’ rule cannot be breached.
- On maturity of the FMP, all the securities in the portfolio mature. Hence on maturity of the FMP, there is no market related risk. There is only a credit risk.
- That means, during the tenure of the FMP, there would be MTM related NAV valuation, but that is ‘academic’ as long as the FMP is held till maturity.
- There is no redemption with the AMC as per rule. Secondary market liquidity in FMPs is poor, almost non-existent. Hence it has to be held till maturity.

Open ended funds

- There are certain open ended funds, though rare, with a passive portfolio management strategy where the portfolio is just left as it is, like an FMP, and the residual maturity comes down with every passing day.
- These funds are loosely called ‘FMPs on an open-ended platform’. This is a colloquial term, not technically correct.
- The advantage of this strategy over FMPs as such is liquidity. If required, there is redemption available with the AMC, subject to exit load.
- The risk of this strategy over FMPs is sudden change of management from passive to active. As long as the fund is within the management mandate as per SID, there is no legal case against them.
- The corresponding event in these open ended funds for maturity in an FMP is portfolio re-build at the end of the indicated term. The risk-averse investor can redeem at that point.

Interval Funds

- There is a category of funds in-between close and open ended, known as Interval Funds. These funds are technically open-ended, but behave like FMPs.
- There is a defined period like 1 year for annual interval funds, 3 months for quarterly interval funds or 3 year for 3-year interval funds.
- The maturity of the securities in the portfolio has to be within the interval period. There is no redemption with the AMC during this period. On this aspect, Interval Funds are similar to FMPs.
- There is a rollover window, usually 2 days, when investors can redeem / invest. After the specified transaction period (usually 2 days) the portfolio is re-constructed, loosely called portfolio rollover. To be noted, it is a fresh portfolio as the earlier one has matured.

Interval Funds

The advantage of this over conventional FMPs is that the investor can review during the rollover window and if funds are not required, let it ‘roll over’.

MTM risk is upto the interval period e.g. 3 months or 1 year.

For a period less than 3 years, there could be a tax advantage over FMPs if the Interval Fund is held for 3 years.

HTM Bonds

Extending the concept of hold-till-maturity, like in case of FMPs, it can be done with a bond portfolio as well.

There would be mark-to-market in the interim, but on maturity there is no MTM.

Bonds are available for various maturities, which can be matched with the cash flow requirements, which is known as laddering.

However, liquidity in bonds is less than in Mutual Funds. In MFs, liquidity is just one redemption away. In case of bonds, it is subject to liquidity available in the secondary market.

✓ Active portfolio management

Active portfolio management has both the upside and downside open. Managing an active portfolio, vis-à-vis a passive one discussed just now, is more exciting.

However, it should be as per the mandate of the Investment Policy.

As long as the maturity horizons for the fund category is respected, volatility risk in the fixed income fund portfolio is reasonably taken care of.

✓ Concept of Laddering (for Liquidity Risk Management)

Laddering means matching investment horizon and maturity of the product, so that there is no market risk on maturity.

This is for goal based investments. If the client is investing with a defined horizon e.g. buying a car after 2 years or foreign trip after 3 years, with the amount tentatively known, the investment should be 'laddered'.

If the view on equity is positive, there is no harm in investing in equity for time-defined requirements, but it should be for very long horizons.

Short to medium horizon, you never know how the equity market will behave.

1. For laddering debt investments, the most appropriate investment is:

- A. Bonds
- B. Mutual Funds
- C. Government Securities (Government bonds)
- D. Money market instruments

2. Interval Funds are:

- A. Open ended funds with a defined maturity date
- B. Close ended funds with defined maturity date
- C. Open ended funds with a defined investment horizon
- D. Close ended funds with no maturity date

Quiz

3. In a Fixed Maturity Plan (FMP), the maturity of the securities in the portfolio

- A. Can be anything, at the discretion of the fund manager
- B. Can be upto the maturity date of the FMP
- C. As defined in the Scheme Information Document (SID), at the discretion of the AMC
- D. Upto 3 years

4. Exit load charged in a mutual fund scheme, for exit within the exit load period, goes to:

- A. The scheme i.e. existing investors in the scheme
- B. The AMC
- C. The Trustees
- D. Is kept in suspense account

5. In a Mutual Fund Scheme with exit load, for redemption within the exit load period

- A. Exit Load is applicable on the gains / returns in the holding period
- B. Exit Load is applicable on your principal amount
- C. Exit Load can be waived off on request
- D. Exit Load is applicable on the entire NAV

6. For debt Mutual Funds' NAV computation, the designated valuation agencies for giving market-based valuation levels for securities are:

- A. CRISIL and ICRA
- B. FIMMDA
- C. AMFI
- D. RBI

Thank You