

# FINANCIAL PLAN

## RETIREMENT EXPENSE PLANNING

Plan prepared for:

Mr. Amit Rathi

Plan prepared by:

Dalmia Advisory Services Pvt. Ltd.

## Case History

Date – Nov 2008

Mr. Amit Rathi, aged 32 years, is a software engineer at a domestic infotech company based in Mumbai. He draws a net salary of Rs.6.50 lacs annually. The contribution towards his EPF a/c is Rs.50,000/- per year. His outstanding balance in EPF a/c is Rs.2,00,000/- as on date. His current monthly living expenses are Rs.15,000/- on self and spouse. Mrs. Reema Rathi, his spouse is a housewife. Amit's risk appetite is moderate.

### **Retirement Goal:-**

Amit wish to retire at age 55 and want to create a retirement corpus which is sufficient to fund his retirement expenses till 75 years of age (life expectancy). For this purpose he is willing to invest between fifty thousand to one lac every year. Currently, he has a life insurance policy with a sum assured of 5 lacs.

## Summary of the plan

### Amit's retirement expense planning:-

Amount needed at the time of retirement after factoring for inflation	Rs. 92.98 lacs
Investment required to achieve the above goal	
a. If invested monthly for 23 years	<b>Rs. 4,514/- every month.</b>
b. If invested annually for 23 years	<b>Rs. 54,163/- every year.</b>
c. If invested annually for first 5 years only	<b>Rs. 1,26,924/- for first 5 years.</b>
Recommended Asset Allocation	<b>Debt: Equity – 50:50</b>

#### Note:

- a. To calculate the fresh investments needed to achieve the retirement corpus, we have taken into consideration the current investments in the form of EPF.

Current Investments	Future Value (After 23 years)
Rs. 2 lacs	Rs. 13.05 lacs
Annual investment of Rs. 50,000/-	Rs. 32.55 lacs

- b. Rate of return on EPF is 8.5%.

Thus, a total of Rs. 45.60 lacs is deducted from the total retirement corpus of Rs. 92.98 lacs and planning has been done for the balance amount of Rs. 47.40 lacs.

Life insurance/disability coverage	Proposed coverage
To protect post retirement expenses of self and spouse	<b>Rs. 46.5 lacs</b>

## A. Personal Information

Name	Relationship	Age	Occupation
Mr. Amit Rathi	Self	32	Service
Mrs. Reema Rathi	Wife	30	Housewife
Mst. Deepak Rathi	Son	3	Student

## B. Assumptions

- I. Inflation is assumed @ 5% p.a.
- II. Net returns (after tax) expected from debt portfolio – 8% p.a.
- III. Net returns (after tax) expected from equity portfolio – 12% p.a.
- IV. Retirement corpus post retirement is assumed to grow @ 7% p.a.
- V. Life expectancy is assumed to be 75 years of age.

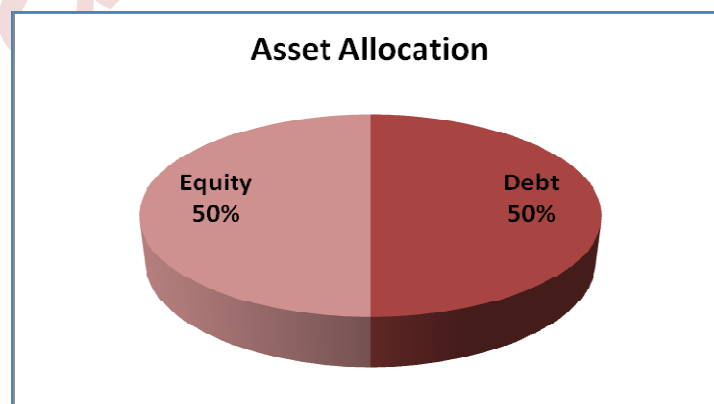
### C. Asset Allocation

Proper asset allocation is an important area of retirement planning. While higher exposure to equity can result in higher returns, it is exposed to high volatility.

Retirement is inevitable and must be planned carefully. Income during retirement ceases or reduces considerably. As such achieving the desired retirement corpus is extremely important. Due to faulty planning, if by any chance, you do not achieve your retirement corpus, there may be little re-course left in life. Investment made to achieve this goal should not be very aggressive. While your risk appetite is moderate, we suggest a slightly conservative exposure to riskier investments.

**We suggest an asset allocation mix of debt and equity in the ratio of 50:50.** This means that 50% investment should be made in debt instruments and the 50% of investment should be made in equity related instruments. We, however, advise you to review the asset allocation on an annual basis.

Due to lower return expectation in debt schemes and higher returns expectation in equity schemes, the asset allocation ( in market value terms ) may tilt in favor of equity schemes. While this has been a prime reason of recommending an initial asset allocation of 50:50, annual reviews are important so that you remain in control of the situation.



## D. Retirement goal – Calculations

Particulars	Details
Current age of Amit	<b>32 years</b>
Amit's Retirement Age	<b>55 years</b>
Number of years left before Amit's retirement	<b>23 years</b>
Life expectancy	<b>75 years</b>
Number of years after retirement	<b>20 years</b>
Portfolio return pre-retirement	<b>10%</b>
Portfolio return post-retirement	<b>7%</b>
Current Monthly living expenses	<b>Rs. 15,000/- p.m.</b>

### Calculations:-

Particulars	Details
Increased cost of living expenses in the first year of retirement (current annual expense of Rs. 1.80 lacs inflated @ 5% p.a.)	<b>Rs. 5,52,874/-</b>
Retirement corpus needed at the time of retirement	<b>Rs. 92.98 lacs.</b>

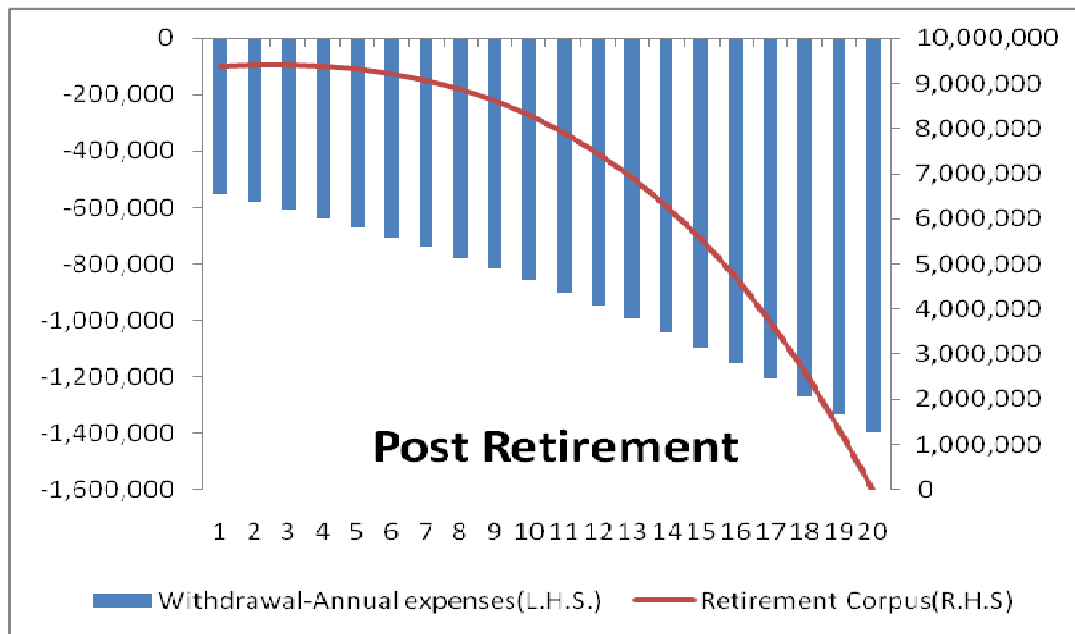
### Meaning of Retirement Corpus

If you invest Rs.92.98 lacs with an anticipated return of 7% pa. (net of taxes) and inflation is assumed @ 5% p.a., then the retirement corpus will provide for your living expenses for the next 20 years. The value of the retirement corpus at the end of 75 years will become **Nil**.

## Post retirement Expenses and Corpus

Age	Beginning Amount	Withdrawal-Annual expenses	Balance	Yr. end value
56	9,297,716	-552,874	8,744,842	9,356,981
57	9,356,981	-580,518	8,776,463	9,390,816
58	9,390,816	-609,544	8,781,272	9,395,961
59	9,395,961	-640,021	8,755,940	9,368,855
60	9,368,855	-672,022	8,696,833	9,305,611
61	9,305,611	-705,623	8,599,988	9,201,987
62	9,201,987	-740,904	8,461,083	9,053,359
63	9,053,359	-777,950	8,275,409	8,854,688
64	8,854,688	-816,847	8,037,841	8,600,490
65	8,600,490	-857,689	7,742,800	8,284,796
66	8,284,796	-900,574	7,384,222	7,901,118
67	7,901,118	-945,603	6,955,515	7,442,401
68	7,442,401	-992,883	6,449,518	6,900,985
69	6,900,985	-1,042,527	5,858,458	6,268,550
70	6,268,550	-1,094,653	5,173,897	5,536,069
71	5,536,069	-1,149,386	4,386,683	4,693,751
72	4,693,751	-1,206,855	3,486,896	3,730,979
73	3,730,979	-1,267,198	2,463,781	2,636,245
74	2,636,245	-1,330,558	1,305,688	1,397,086
75	1,397,086	-1,397,086	0	0

### Graphical representation - Post retirement Expenses and Corpus



**Note:-**

- a. Annual expenses grows @ 5% (inflation rate)
- b. Investment grows @ 7%.

## E. Investment needed to achieve retirement corpus

Investing in debt and equity in the ratio of 50:50, the following investment needs to be made to achieve the retirement corpus at the beginning of age 56:-

If invested monthly for 23 years	<b>Rs. 4,514/-</b> every month.
If invested annually for 23 years	<b>Rs. 54,163/-</b> every year.
If invested annually for first 5 years only	<b>Rs. 1,26,924/-</b> for first 5 years.

### Note:

- c. To calculate the fresh investments needed to achieve the retirement corpus, we have taken into consideration the current investments in the form of EPF.

Current Investments	Future Value (After 23 years)
Rs. 2 lacs	Rs. 13.05 lacs
Annual investment of Rs. 50,000/-	Rs. 32.55 lacs

- d. Rate of return on EPF is 8.5%.

Thus, a total of Rs. 45.60 lacs is deducted from the total retirement corpus of Rs. 92.98 lacs and planning has been done for the balance amount of Rs. 47.40 lacs.

## **F. Insurance**

One of the greatest risk in achieving retirement corpus is premature death/disability of the earning member. Because of death/disability, the income of the earning member may stop or reduce and the surviving spouse may not be able to continue the investments needed to achieve the retirement corpus.

In case of premature death/disability of Mr. Amit, the income sources can dry up whereas expense will continue. In this situation there must be a provision of lifelong annuity even before retirement age. In case of premature death/disability in the current year, the following funds will be required to ensure lifelong annuity for the surviving spouse (in case of death of earning member)/both (in case of disability)

Particulars	Details
Current age of Amit	<b>32 years</b>
Life expectancy	<b>75 years</b>
Annuity required for	<b>43 years (75-32)</b>
Portfolio return post death/disability	<b>7%</b>
Monthly expenses	<b>Rs. 15,000/- p.m.</b>
Corpus needed for annuity	<b>Rs. 53.52 lacs</b>
Current investments	<b>Rs. 2 lacs (EPF)</b>
Current Life insurance	<b>Rs. 5 lacs</b>
Fresh Life insurance required	<b>Rs. 46.51</b>

As such we suggest a life cover cum disability cover benefit for Mr.Amit to cover this contingency. The cost of this insurance will be Rs. 13,000/- every year for next 20 years. This money should be treated as an expense as there will be no maturity benefits available under this plan.

## **G. Investment Schemes Recommended**

### **i. Debt Allocation**

As per the plan, 50% of fresh investment is to be allocated towards debt schemes. Under debt portfolio, we recommend the following schemes.

- a. Public Provident Fund (PPF) a/c,
- b. Post office Monthly Income Scheme
- c. Floater schemes of mutual funds
- d. EPF (already having)

### **ii. Equity Allocation**

The balance 50% of fresh investment is to be allocated towards equity schemes. We recommend investment in the following diversified equity mutual fund schemes.

- a. HDFC Equity Fund
- b. Reliance Growth Fund

## H. Alternative planning

By changing the proposed asset allocation mix and the expected rate of return, investment required to achieve the financial goals may change.

### i. **Alternative Case – 1**

If asset allocation is decided at a debt - equity ratio of 60:40, the investment outflow may increase as per the following chart. However, the risk of the portfolio will also reduce accordingly due to lower exposure in equity.

If invested monthly for 23 years	<b>Rs. 4,781/-</b> every month.
If invested annually for 23 years	<b>Rs. 57,378/-</b> every year.
If invested annually for first 5 years only	<b>Rs. 1,37,108/-</b> for first 5 years.

### ii. **Alternative Case – 2**

If asset allocation is decided at a debt - equity ratio of 40:60 and expected return on equity is assumed @ 15% p.a., the investment outflow may reduce as per the following chart. However, the risk of the portfolio will also increase accordingly due to higher exposure in equity.

If invested monthly for 23 years	<b>Rs. 3,273/-</b> every month.
If invested annually for 23 years	<b>Rs. 39,276/-</b> every year.
If invested annually for first 5 years only	<b>Rs. 83,395/-</b> for first 5 years.

## I. Risk in retirement

- i. **Living too long** – The planning is made on the basis of your life expectancy of 75 years. In case either of you live longer than this then you may be short of funds.
- ii. **Higher inflation than anticipated** – If inflation is higher than projected, cost of living will increase and so will the required funds.
- iii. **Lower return than anticipated return** – If the actual return from the portfolio is lower than projected, desired retirement corpus may not be achieved.

**The best way to counter these risks is to plan conservatively and do regular reviews.**

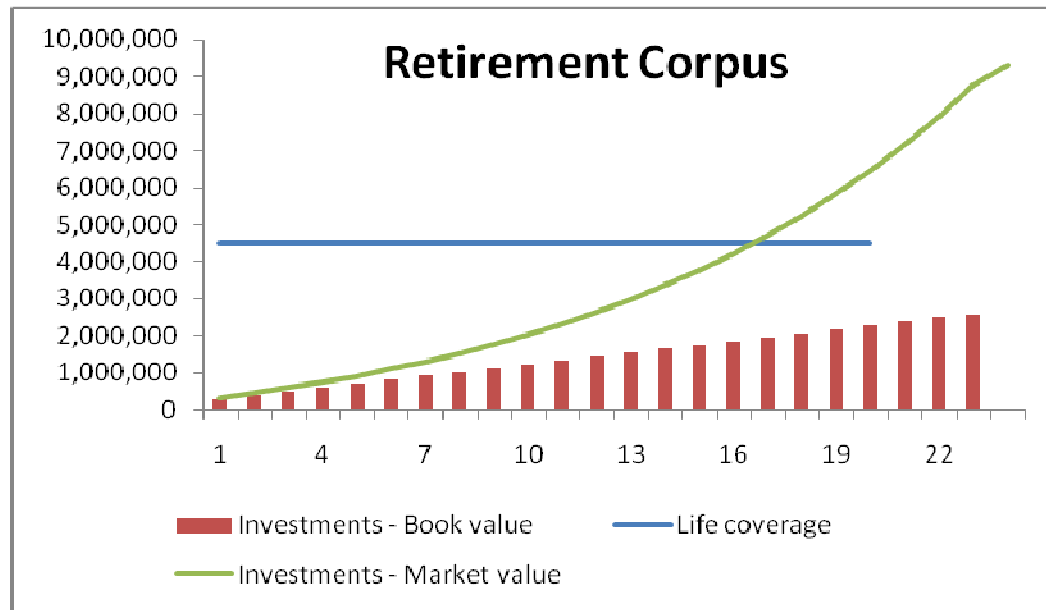
## J. Review

No planning is complete without regular review. Due to changing personal circumstances, economic conditions, financial goal revision, investment return adjustments, etc. regular review of the financial plan is important. **We suggest you to do annual review with respect to this financial plan.**

### **Enclosures:**

1. Details about PPF scheme
2. Details about Post Office MIS Scheme.
3. Details about HDFC Equity fund and Reliance growth fund.
4. Details about Reliance growth fund.
5. Application forms of respective schemes.

## Graphical representation – Retirement Plan



### Investments Book value –

It's a cumulative figure of investment made till date. Investments include existing contribution towards EPF, expected contribution towards EPF and fresh investment as suggested in plan.

### Investments Market value –

It's a cumulative figure of market value of investments till date.