

# CASE STUDY: Insurance IRR Calculator

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## Client Background

**Client Name:** Ramesh Sinha

**Age:** 38

**Profession:** Senior Technician at a Private Manufacturing Company

**Financial Situation:**

- Annual income: ₹11.5 lakh
- Existing investments: PF, RD, ₹12,000 monthly SIP
- Has one traditional insurance plan bought 8 years ago
- Low-risk behaviour but wants better returns

**Goals:**

- Build a retirement corpus of ₹50–60 lakh
- Wants to invest steadily without locking money unnecessarily

**Concerns:**

- He recently received a proposal for a “*Guaranteed Maturity Plan*” from an insurance agent promising “**₹25 lakh maturity**” if he invests **₹1,50,000 per year for 10 years**.
- He wants to know whether this is really beneficial, and if a mutual fund investment would do better.

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## Purpose of Using the Calculator

Ramesh wants to check whether the **insurance savings plan** recommended by the agent is actually beneficial.

His MFD wants to demonstrate:


- **Actual IRR** of the insurance policy
- **Comparison** with investing the same amount in mutual funds
- How much mutual fund investment would be needed to reach the same maturity?

The calculator will help Ramesh take a clear, numbers-backed decision.

## Assumptions Entered in the Calculator

*(All values entered in the Masterstroke Insurance IRR Calculator)*

Policy Name (Optional)	Secure Future Guarantee Plan	
Current Age (Optional)	38	Yrs
Annual Premium	1,00,000	₹
Premium Payment Term	10	Yrs
Policy Term	15	Yrs
Payout Mode	<input checked="" type="radio"/> Maturity <input type="radio"/> Periodic <input type="radio"/> Annuity	
Expected Maturity Amount	17,50,000	₹
Add Mutual Fund Comparison	<input checked="" type="radio"/> Yes <input type="radio"/> No	
Add Mutual Fund Investment Maturity Value	<input checked="" type="radio"/> Yes <input type="radio"/> No	
Expected Rate of Return	12	%

☒ Ramesh Sinha 

☐ Add Suggested schemes for investment

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# Calculator Output

Policy Name	Secure Future Guarantee Plan
Current Age	38 Years
Annual Premium	₹ 1,00,000
Premium Payment Term	10 Years
Policy Period	15 Years
Total Premium Paid	₹10,00,000
Expected Maturity Amount	₹ 17,50,000

## Insurance Policy Expected IRR

5.36 %

Annual Investment Required in Mutual Fund @ 12% for Similar Payout

₹ 50,522

\*If you invest in Mutual Funds with an expected return of 12.00 %, you need to invest Rs.50,522 for 10 years against the premium of Rs.1,00,000

Expected Value of Investment If Premium Amount Is invested In Mutual Fund

₹ 34,63,809

If you invest in Mutual Funds with an expected return of 12 %, you need to invest Rs.50,522 for 10 years against the premium of Rs.1,00,000

\* It is assumed that premiums are paid at beginning of year and payments are received at end of year.

\* Return are not guaranteed. The above is for illustration purpose only.

## Insurance IRR Calculation For Ramesh Sinha

### Projected Cash Flow Summary (Insurance)

Year	Premium Payment	Payout
1	₹ 1,00,000	₹ 0
2	₹ 1,00,000	₹ 0
3	₹ 1,00,000	₹ 0
4	₹ 1,00,000	₹ 0
5	₹ 1,00,000	₹ 0
6	₹ 1,00,000	₹ 0
7	₹ 1,00,000	₹ 0
8	₹ 1,00,000	₹ 0
9	₹ 1,00,000	₹ 0
10	₹ 1,00,000	₹ 0
11	₹ 0	₹ 0
12	₹ 0	₹ 0
13	₹ 0	₹ 0
14	₹ 0	₹ 0
15	₹ 0	₹ 17,50,000

## Insurance IRR Calculation For Ramesh Sinha



### Projected Cash Flow Summary (Mutual Fund)

Annual Investment Required in Mutual Fund for Similar Payout

Year	Investment Amount	End Of Year Value
1	₹ 50,522	₹ 56,585
2	₹ 50,522	₹ 1,19,960
3	₹ 50,522	₹ 1,90,941
4	₹ 50,522	₹ 2,70,439
5	₹ 50,522	₹ 3,59,476
6	₹ 50,522	₹ 4,59,199
7	₹ 50,522	₹ 5,70,888
8	₹ 50,522	₹ 6,95,979
9	₹ 50,522	₹ 8,36,082
10	₹ 50,522	₹ 9,92,997
11	₹ 0	₹ 11,12,157
12	₹ 0	₹ 12,45,615
13	₹ 0	₹ 13,95,089
14	₹ 0	₹ 15,62,500
15	₹ 0	₹ 17,50,000

Report Date: 20/11/2025

### Projected Cash Flow Summary (Mutual Fund)

Expected Value of Investment If Premium Amount is Invested In Mutual Fund

Year	Investment Amount	End Of Year Value
1	₹1,00,000	₹1,12,000
2	₹1,00,000	₹2,37,440
3	₹1,00,000	₹3,77,933
4	₹1,00,000	₹5,35,285
5	₹1,00,000	₹7,11,519
6	₹1,00,000	₹9,08,901
7	₹1,00,000	₹11,29,969
8	₹1,00,000	₹13,77,566
9	₹1,00,000	₹16,54,874
10	₹1,00,000	₹19,65,458
11	₹0	₹22,01,313
12	₹0	₹24,65,471
13	₹0	₹27,61,327
14	₹0	₹30,92,687
15	₹0	₹34,63,809

Report Date : 20/11/2025

## Interpretation

### What the Results Mean

- In the insurance plan, after **15 years**, Ramesh earns only **5.36%**, which is assumed to have failed to beat the long-term inflation.
- In the mutual fund option, the same investment grows to **₹34.63 lakh with 12% assumed return in the same tenure**, thanks to compounding at a higher return rate.

- After 15 years, the mutual fund creates **₹17.13 lakh more wealth** than the guaranteed plan, which is almost 100% more.
- If Ramesh wants **only ₹17.5 lakh**, he needs to invest just **₹50,522 yearly** in mutual funds—almost **50% lower contribution for the same outcome!**

## Disclaimer

*This case study is a fictional example created solely for educational and illustrative purposes. “Ramesh Sinha” and the insurance plan mentioned are not real and have been used only to demonstrate how the Insurance IRR Calculator works. Actual returns from insurance products and mutual funds may vary based on product features, market conditions, taxation, and regulatory changes. Mutual fund investments are subject to market risks. Please read all scheme-related documents carefully. This illustration should not be treated as investment advice or a recommendation of any specific product. Past performance may or may not be sustained in the future.*