

Retirement Fund Calculator of National Pension System

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Abstract

In the developing country like India after 20 to 25 years will have more than 600 million people who will be on the threshold of old age and a large percentage of them will be in rural areas or unorganized sector where illiteracy is relatively high. Funding for old age needs such as medicine, pharmacy, and upbringing will be the most important need of this age. A study of the needs of the people in these unorganized and rural areas reveals that this essential retirement fund requirements can be met by the National Pension System. Despite being the cheapest pension scheme in the world this scheme is far away from the unorganized and rural areas as it is promoted only through certain media. Unless such schemes are explained through physical means, rural area or unorganized sector remains hundreds of miles away from such vital schemes. For this we have created a calculator in which a person can contribute from ₹500/- per month to ₹5000/- per month. By contributing this amount one can know his retirement fund at the age of 60 at 5%, 10%, 12%, 15% Compound Annual Growth Rate (CAGR) based on which the pension will be paid to the concerned individual.

Keywords

Unorganized Sector, Retirement Fund, Compound Annual Growth Rate, Net Asset Value, Permanent Retirement Account Number,

Objective

- ✚ To provide the sustainable solution for creating awareness about National Pension System for the rural and unorganized sector.
- ✚ To aware the people about the impact of compounding on their systematic small savings which creates the huge corpus for their pension.

Introduction

The National Pension System (NPS), earlier known as the New Pension Scheme, is a pension system open to all citizens of India. The NPS invests the contributions of its subscribers into various market-linked instruments such as equities and debts and the final pension amount depends on the performance of these investments. It has an applicable interest rate of 5% to 15% on contributions made. NPS can be subscribed by any Indian citizen (resident/non-resident/overseas) aged between 18-60 years on a voluntarily basis NPS offers following important features to help you save for retirement you will be allotted a unique Permanent Retirement Account Number (PRAN) this unique account number will remain the same for the rest of your life. The subscription to NPS commences with the opening of the

Tier I Pension Account:

You will contribute your savings for retirement into this non-withdraw able account. However you can make partial withdrawals for specific purposes or you can go in for a premature exit. Contribution to NPS Tier I qualify for tax deduction under Section 80C up to Rs 1.5 lakh. Tax deduction is available under Section 80CCD (1B) up to Rs 50,000 in addition to Section 80C benefits. At maturity, the entire corpus is tax-exempt.

Tier II Savings Account:

This is simply a voluntary savings facility you will be free to withdraw your savings from this account whenever you wish. There is no tax deduction under Tire II account. At maturity, the entire corpus is taxable as per income slab. Under NPS, how your money is invested will depend upon your own choice.

NPS offers you a number of fund managers (Ten) and multiple investment options (Four) to choose from. In case you do not want to exercise choice as regards asset allocation, your money will be invested as per the “Auto Choice” option. You can open an NPS account with authorized branches of service providers called ‘Points of Presence’ (POPs).

Methodology

Step-1 Collection of data from responses of questionnaires and web resources.

Step-2 Used Formula of Compounding Interest as follows.

$$A = P \left(1 + \frac{r}{n} \right)^{nt}$$

Rate of interest
Time (Years)

Amount
Principal
Number of times interest is compounded per year

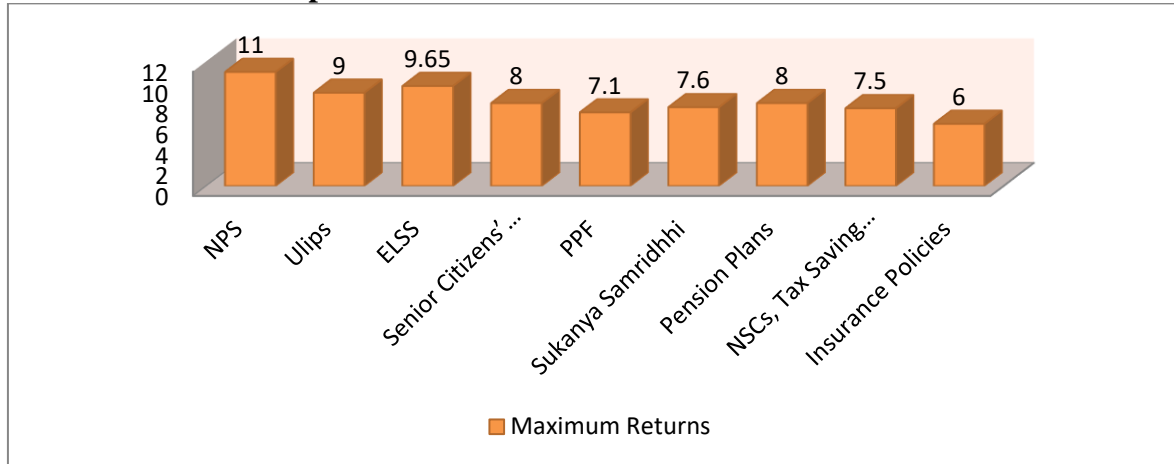
Image of NPS Calculator



Comparison Chart of Various Investment Avenues.

RANK	INVESTMENT OPTION	RETURNS / INTEREST RATE (in %)	Maximum Returns	PERIOD	LOCK-IN PERIOD
1	NPS	8 to 11	11	Past five years	Till Retirement
2	Ulips	8 to 9	9	Past five years	At least five years
3	ELSS	9.65	9.65	Past five years	3 Years
4	Senior Citizens' Saving Scheme	8	8	Jan-Mar 2023	5 Years
5	PPF	7.1	7.1	Jan-Mar 2023	15 Years from inception
6	Sukanya Samridhhi	7.6	7.6	Jan-Mar 2023	Till girl child is 18 years
7	Pension Plans	7 to 8	8	Past five years	Till Retirement
8	NSCs, Tax Saving FDs	7 to 7.5	7.5	Jan-Mar 2023	5 Years
9	Insurance Policies	5 to 6	6	Minimum five years	At least five years

Tabular form
Comparison Chart of Various Investment Avenues.



Conclusion:

Retirement Fund Calculator of National Pension System is beneficial for better understanding of Corpus of NPS. As it is a low tech – high touch calculator in nature, is very appealing, user friendly and helpful for households of rural India as well to the as unorganized sector.

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