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ATAL PENSION YOJANA (APY) WHETHER AN ELIXIR FOR POST RETIREMENT FINANCIAL SECURITY

Mr Bijaya Kumar Barik *   Dr.M.Jyothsna**
**Research Scholar (PT), Gitam Institute of Management, GITAM University, Visakhapatnam,India.*
***Associate Professor,GITAM Institute of Management,GITAM University,Visakhapatnam,India.*

Abstract
Due to the rise of nuclear families and migration of younger earning members, old people are left alone to fend for themselves. Rise in cost of living coupled with increase in longevity have added to the woes of the common man. Unorganised or informal sector constitutes more than 88% of the total labour force .Social Sector Schemes pertaining to Pension Sector gives an assured monthly income. This ensures a dignified life in one's old age. To encourage the workers in unorganised sector to voluntarily save for their retirement, the Government had started a guaranteed pension scheme - Atal Pension Yojana (APY). The objective of this paper discusses the scope for coverage of the Atal Pension Scheme, adequacy of the pension amount to the recipient after attainment of 60 years of age and the financial sustainability of the scheme over long run.

Key Words: Atal Pension Yojana, Pradhan Mantri Jan Dhan Yojana, Relative Guarantees, Adequacy, Sustainability.

1. INTRODUCTION

India is a developing country. It has a low standard of living. Peoples' savings are low. One cannot be productively engaged in old age as in youth. Thanks to the rise of nuclear families and migration of younger earning members, old people are left alone to fend for themselves. Rise in cost of living coupled with increase in longevity have added to the woes of the common man. Social Sector Schemes pertaining to Pension Sector gives an assured monthly income. This ensures a dignified life in one's old age. Unorganised or informal sector constitutes more than 88% of the total labour force of 47.29 crore (as per the 66th Round of NSSO Survey of 2011-12).To encourage the workers in unorganised sector to voluntarily save for their retirement, the Government had started a guaranteed pension scheme - Atal Pension Yojana (APY). India has the highest population of young people in the world. But as the young population ages, it is also going to be pension-less. In the newly formed government financial inclusion, social security, and low-cost benefits for the masses have been a priority in its agenda and as such it has worked towards promoting new schemes that make financial security for the common man. The aim of this scheme is to bring pension benefits and also to see that the unorganised sector is to enjoy social security with minimum contribution per month. 'The first step towards achievement of social security was the rollout of the Pradhan Mantri Jan Dhan Yojana (PMJDY). With Phase I being declared a major success and 1.8 crore accounts having been opened across the country, the government has flagged off three new schemes on 9 May 2015 – two insurance schemes (Pradhan Mantri Jeevan Jyoti Bima Yojana, and Pradhan Mantri Suraksha Bima Yojana), and a pension scheme (Atal Pension Yojana). This is called Phase II of the PMJDY, since it was important to get people into mainstream banking before any benefits can be extended to them.'Regulated by Pension Fund Regulatory Development Authorities (PFRDA), with transparent investment norms, APY is a government-backed pension scheme in India targeted at the unorganised sector. This scheme provides a defined pension, depending on the amount of contribution, and its period.The subscribers would receive the fixed minimum pension of Rs. 1000 per month, Rs. 2000 per month, Rs. 3000 per month, Rs. 4000 per month, Rs. 5000 per month, at the age of 60 years, depending on their contributions. This again would be based on the age of joining the APY. The minimum age of joining APY is 18 years and maximum age is 40 years. The benefit of fixed minimum pension would be guaranteed by the Government. The APY was introduced from 1st June, 2015 formally launched by Prime Minister Narendra Modi. This scheme aims to increase the number of people covered under the pension scheme. As of May 2015 data , only 11% of India's population is covered by any kind of pension scheme. This scheme will be linked to the bank accounts opened under the Pradhan Mantri Jan Dhan Yojana scheme and the contributions will be deducted automatically. Most of these accounts had zero balance initially. The government aims to reduce the number of such zero balance accounts by using this and related schemes.A citizen of India, who belongs to the unorganized sector, can open Atal Pension Yojana account he or she should be between 18 – 60 years of age as on the date of submission of his/her application.

2. REVIEW OF LITERATURE

Management Guru Peter Drucker said "By providing financial protection against the major 18th and 19th century risk of dying too soon, life insurance became the biggest financial industry of the century. Providing financial protection against the new risk of not dying soon enough may well become the next century's major and most profitable financial industry," Olivia S. Mitchell (2000) says that in developing and developed countries many elderly people depend on pension. She says " defined contribution plans have become very popular, sometimes at the expense of defined benefit pensions as a result, pension plans will require the attention of insurance experts for the foreseeable future." One way for sustained poverty eradication and social protection is an informal pension scheme. This allows vulnerable people to have a guarantee and maintain or improve their living standards. The challenge for any government is informal sector worker's income is not regulated by an agency. This makes it difficult to make pension contribution mandatory as in the case of the formal sector workers. Aashish Gupta (2013) conducted a survey of the functioning of the National Old-Age Pension Scheme in two districts of Jharkhand and Chhattisgarh. He found that beneficiaries have difficulties in accessing the banking system and face long delays in receiving their small pensions. Yet, the scheme functions as an important provider of social security to the elderly.

Renuka Sane (2015) , says though pension schemes like NPS- swavalamban Scheme were in existence there was a lack of clarity regarding the benefits at the age of 60. The Atal Pension scheme has been designed to bring about more clarity in the process. The aim of APY is motivated by the desire of the government to ensure that on contributing continuously, a member gets at least a pension of Rs.1, 000. APY seems like a minimum return guarantee which will ensure that accumulated savings at retirement do not fall below a certain value. Shah, (2003) has discussed guarantees where he says some guarantees can prove to be very costly if not planned well. He also mentions that guarantees are one mechanism through which this investment risk can be contained." Snorre Lindset(2004) says "many real-world financial contracts have some sort of minimum rate of return guarantee included. One class of these guarantees is so-called relative guarantees, i.e., guarantees where the minimum guaranteed rate of return is given as a function of the stochastic return on a reference portfolio. " The two kinds of guarantees discussed by Pennacchi (1999), are an absolute rate of return guarantee promises a pre-specified rate of return and relative rate of return guarantee promises a return close to the average of all funds. Under APY the subscriber may actually be getting a sub optimal return.

3. OBJECTIVE OF THE STUDY

1. To study the scope for coverage of the Atal Pension Scheme.
2. To study the adequacy of the pension amount to the recipient after attainment of 60 years of age.
3. To study the financial sustainability of the scheme over long run.

4. FORMULATION OF HYPOTHESIS

1. **Coverage:**
   Ho- The scheme is not covering majority of the adult population.
   H1- The scheme is covering majority of the adult population.

2. **Adequacy**
   Ho- The pension amount is not adequate to the recipient after attainment of retirement age at 60 years
   H1- The pension amount is adequate to the recipient after attainment of retirement age at 60 years

3. **Sustainability of the scheme**
   Ho- Atal Pension Scheme will not be financially sustainable over long run.
   H1- Atal Pension Scheme will be financially sustainable over long run.

5. METHODOLOGY

1. Future Value (Corpus) of the monthly payments till retirement is calculated using FV Formula as below:

$$FV\ of\ Annuity\ Due = (1+r) \times P\left[\frac{(1+r)^n - 1}{r}\right]$$

$$P = Periodic\ Payment$$
$$r = rate\ per\ period$$
$$n = number\ of\ periods$$

The future value of annuity due formula is used to calculate the ending value of a series of payments or cash flows where the first payment is received immediately. The first cash flow received immediately is what distinguishes an annuity due from an ordinary annuity.

The future value of an annuity due formula is used to calculate what the value at a future date would be for a series of periodic payments. The future value of an annuity formula assumes that

1.The rate does not change
2. The first payment is made at the beginning or immediately.
3. The periodic payment does not change

If the rate or periodic payment does change, then the sum of the future value of each individual cash flow would need to be calculated to determine the future value of the annuity

2. Present Value of the Corpus/Monthly Pension amount is calculated using PV Formula as below:

$$PV = \frac{C_1}{(1+r)^n}$$

$$C_1 = Cash\ Flow\ at\ period\ 1$$
$$r = rate\ of\ return$$
$$n = number\ of\ periods$$

Present Value (PV) is a formula used in Finance that calculates the present day value of an amount that is received at a future date. The premise of the equation is that there is "time value of money". For our calculation of time value of future Corpus amount, the inflation rate is considered as 5%.

6. A APY-COVERAGE OF THE SCHEME

India's retirement income ranks the lowest among 25 countries in the world with Denmark being rated as the numero uno, said a study for retirement income conducted by the Melbourne Mercer Global Pension Index (MMGPI)-2014."While some countries have well-established retirement systems that have stood the test of time, others are just developing, especially those within the Asian region," said MMGPI. In view of this launching Atal Pension Yojana is a step forward towards extensive coverage of young population as well as their financial security at old age.

This paper will analyse coverage of the total population, adequacy of the pension and to see whether the new scheme is sustainable over long period of time or not.

India's Demography
Population in different age groups India as per census -2011

Age group	Population (in crores)	Percentage
All ages	121.05	
0-4	11.28	9.32%
5-9	12.69	10.48%
10-14	13.26	10.95%
15-59	72.99	60.30%
60-99	10.32	8.53%
100+	0.06	0.05%
Age not stated	0.45	0.37%

Source:Census-2011

The adult above 18 years

Adult (18 years and above)	60.30 Crores	
(A) Adult (18-40 years)	**38.98 Crores**	**65%Eligible for APY**
(B) Adult (Above 40 years)	21.32 Crores	35%

The scheme is covering 32.20% of total population of India (as per 2011 census) and 65% of total adult population. Any person of age 18-40 years having a bank account is eligible to enrol for the scheme, however, as the scheme is meant mainly for unorganised sector, let us discuss about it.

Unorganised Sector

The term 'unorganised worker' has been defined under the Unorganised Workers' Social Security Act, 2008, as a home based worker, self-employed worker or a wage worker in the unorganised sector and includes a worker in the organised sector who is not covered by any of the Acts mentioned in Schedule-II of Act i.e. The Employee's Compensation Act, 1923 (3 of 1923), The Industrial Disputes Act, 1947 (14 of 1947), The Employees' State Insurance Act, 1948 (34 of 1948), The Employees Provident Funds and Miscellaneous Provision Act, 1952 (19 of 1952), The Maternity Benefit Act, 1961 (53 of 1961) and The Payment of Gratuity Act, 1972 (39 of 1972). 8.2 As per the survey carried out by the National Sample Survey Organisation in the year 2009-10, the total employment in both organized and unorganised sector in the country was of the order of 46.5 crore. Out of this, about 2.8 crore were in the organised sector and the balance 43.7 crore in the unorganised sector. Out of 43.7 crore workers in the unorganised sector, 24.6 crore workers were employed in agriculture sector, 4.4 crore in construction, and remaining were in manufacturing activities, trade and transport, communication & services. A large number of unorganized workers are home based and are engaged in occupations such as beedi rolling, agarbatti making, papad making, tailoring, and embroidery work.

Existing Pension Coverage status under National Pension Sscheme (Swavalamban)

In unorganised sector presently around 41 lakhs NPS accounts were already opened under Swavalamban Scheme. The details of NPS accounts and Assets Under Management are as under:

Sector	**Subscribers as on March 31, 2015 (in Lakhs)**	**Assets Under Management as on March 31, 2015 (in crores INR)**
Central Govt.	15.11	36,737
O/w CABs	1.21	4,620
State Govt.	26.30	36,244
O/w SABs	3.96	2,498
Corporate Sector	3.73	5,675
UoS	0.86	594
NPS Lite- Swavalamban	**41.46**	**1,606**
Total	**92.63**	**87,974**

Note: The Data is as on last day of the month. The AUM shown in the sheet does not include the AUM of residual and inter-sector shifting subscribers. The contribution uploaded by Nodal Offices and matched booked in CRA system has been considered.* Source:PFRDA-NPS Bulltin April, 2015-page 16

Coverage Scope for APY

The minimum age of joining APY is 18 years and maximum age is 40 years. Therefore the coverage is for approximately 39 crores of Indian population employed or unemployed covering 65% of adult population, out of which around 7-8% who are employed in organised sector are covered under some formal pension and balance can avail the facility of a guaranteed pension under APY-1.

Further, it is noteworthy to mention here that a chance was given to people of 60 years and above to join another guaranteed pension scheme for senior citizens during August 15, 2014 to August 14, 2015 i.e.Varistha Pension Bima Yojana of LIC, (Min. Rs. 500/- to max. Rs.5000/- per month). It was a single premium pension scheme with a high rate of return ranging between 9% to 9.38% p.a. as per budget 2014-15 provisions by Govt. of India.

6 B. APY- PENSION ADEQUACY AT THE AGE OF 60 YEARS

The age of exit and start of pension would be 60 years. Therefore, minimum period of contribution by the subscriber under APY would be 20 years or more. Atal Pension Yojana (APY) is open to all of age 18-40 years having a bank account. The Central Government would also co-contribute 50% of the total contribution or Rs. 1000 per annum, whichever is lower, to each eligible subscriber account, for a period of 5 years, i.e., from Financial Year 2015-16 to 2019-20, who join the NPS between the period 1st June, 2015 and 31st December, 2015 and who are not members of any statutory social security scheme and who are not income tax payers. However the scheme will continue after this date but Government Co-contribution will not be available. The monthly contribution chart provided in APY Brochure is as under:

Atal Pension Yojana- Indicative Monthly Contribution Chart

Age of Entry	Monthly Pension of Rs.1000/-	Monthly Pension of Rs.2000/-	Monthly Pension of Rs.3000/-	Monthly Pension of Rs.4000/-	Monthly Pension of Rs.5000/-
18	42	84	126	168	210
20	50	100	150	198	248
25	76	151	226	301	376
30	116	231	347	462	577
35	181	362	543	722	902
40	291	582	873	1164	1454

Source: APY- Brochure

Table of contribution levels, fixed monthly pension of Rs. 1,000 per month to subscribers and his spouse and return of corpus to nominees of subscribersand the contribution period under Atal Pension Yojana

Age of joining	Years of contribution	Indicative monthly contribution by the subscriber	Monthly Pension to the subscriber and his spouse	Indicative return of corpus to the nominee
18	42	42	1000	170000
20	40	50	1000	170000
25	35	76	1000	170000
30	30	116	1000	170000
35	25	181	1000	170000
40	20	291	1000	170000

Source:APY-Brochure

Table of contribution levels, fixed monthly pension of Rs. 5,000 per month to subscribers and his spouse and return of corpus to nominees of subscribers and the contribution period under Atal Pension Yojana

Age of joining	Years of contribution	Indicative monthly contribution by the subscriber	Monthly Pension to the subscriber and his spouse	Indicative return of corpus to the nominee
18	42	210	5000	850000
20	40	248	5000	850000
25	35	376	5000	850000
30	30	577	5000	850000
35	25	902	5000	850000
40	20	1454	5000	850000

We will analyse the contributions made for getting a pension of Rs.1000/-(the minimum) and Rs.5000/-(the maximum). The following table shows the contributions made by the pension seeker, the estimated corpus that will be @8% CAGR and 10%CAGR. It is evident from the table that Govt. has considered CAGR of 8% under APY which will generate a minimum corpus of Rs.1.7 lakhs to be returned to the nominee in case of death of the person who has opted a pension of Rs.1000/ pm. Similarly, the corpus would be Rs.8.5 lakhs for the person who has opted a pension of Rs.5000/- PM. This corpus calculated below, does not include the value of initial Govt. Contributions*. If this is considered then it will be further more.

Eaxmple-1 -Getting a pension of Rs.1000/- per month & indicative corpus of Rs. 1.7 lakhs

Age of joining	Total Contribution by the subscriber	Indicative Corpus at age of 60 years		Present Value of Rs.1000/- pension at the age of 60 years after inflation adjustment.(inflation @5% p.a.)	Present Value of the Corpus at age of 60 years after inflation adjustment (inflation @5% p.a.)	
	(Monthly Amt.* 12* No. of years)	8% CAGR	10%CAGR		8% CAGR	10%CAGR
18	21168	1,73,061	3,25,260	129	22297	41906
20	24000	1,74,550	3,16,204	142	24794	44915
25	31920	1,74,335	2,88,544	181	31605	52310
30	41760	1,72,882	2,62,217	231	40001	60671
35	54300	1,72,136	2,40,157	295	50832	70919
40	69840	1,71,405	2,20,976	377	64601	83284

(*GoI will co-contribute to each eligible subscriber, for a period of 5 years who joins the scheme between the period 1st June, 2015 to 31st December, 2015. The benefit of five years of government Co-contribution under APY would not exceed 5 years for all subscribers including migrated Swavalamban beneficiaries)

The main issue on pension adequacy is erosion of pension value due to inflation. The value of Rs.1000/- after 42 years for a person aged 18 years who is joining today is Rs.129/-per month and it is Rs.377/- per month after 20 years for a person aged 40 years, after adjustment of inflation. Even the value of the corpus of Rs. 1.73 lakhs payable to the nominee on the event death of principal pension seeker will be Rs.22297/- or even lower for person who joins at 18 years of age and Rs.64601/- or lower for person who joins at 40 years of age.

Similarly, the value of Rs.5000/- after 42 years for a person aged 18 years who is joining today is Rs.644/- per month and it is Rs. 1884/- per month after 20 years for a person aged 40 years, after inflation adjustment as given below.

Eaxmple-2 -Getting a pension of Rs.5000/- per month & indicative corpus of Rs. 8.5 lakhs

Age of joining	Total Contribution by the subscriber	Indicative Corpus at age of 60 years		Present Value of Rs.1000/- pension at the age of 60 years after inflation adjustment.(inflation @5% p.a.)	Present Value of the Corpus at age of 60 years after inflation adjustment (inflation @5% p.a.)	
	(Monthly Amt.* 12* No. of years)	8% CAGR	10%CAGR		8% CAGR	10%CAGR
18	105840	8,65,304	16,26,302	644	111485	209532
20	119040	8,65,770	15,68,372	710	122979	222780
25	157920	8,62,500	14,27,536	906	156363	258798
30	207720	8,59,937	13,04,302	1157	198970	301786
35	270600	8,57,826	11,96,804	1477	253318	353419
40	348960	8,56,436	11,04,122	1884	322782	416132

The value of corpus of Rs. 8.5 lakhs will be Rs. 1.11 lakhs or lower for person who joins the scheme at 18 years of age and Rs. 3.22 lakhs or lower for person who joins at 40 years age.

In both the above Examples, the long term inflation is taken as 5%. As inflation is a major factor in pension planning, why the long term inflation is considered as 5% is explained below:

India: Inflation rate from 2010 to 2060

The statistic shows the inflation rate in India from 2008 to 2015, with projections up until 2060. The inflation rate is calculated using the price increase of a defined product basket. This product basket contains products and services, on which the average consumer spends money throughout the year. They include expenses for groceries, clothes, rent, power, telecommunications, recreational activities and raw materials (e.g. gas, oil), as well as federal fees and taxes. According to OECD Long Term forecast on inflation, it will be between 4-5 percent from 2016 to 2060 period.

2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
8.96	4.52	9.62	8.82	7.22	6.68	6.55	6.14	4.74	4.49	4.46
2019	2020	2025	2030	2035	2040	2045	2050	2055	2060	
4.46	4.47	4.50	4.51	4.52	4.52	4.53	4.53	4.53	4.53	

Source: OECD Economic Outlook No 95 - Long-term Baseline Projections, 2014

6 C. APY- SUSTAINABILITY OF THE SCHEME

The scheme is mainly a contributory scheme with an element of guarantee from Govt. on pension amount of Rs.1000 to Rs.5000/- depending on the age, period and amount of contribution by the subscriber. Govt. of India will co-contribute to each eligible subscriber, for a period of 5 years who joins the scheme between the period 1st June, 2015 to 31st December, 2015. The benefit of five years of government Co-contribution under APY would not exceed 5 years for all subscribers including migrated Swavalamban beneficiaries.

There are two aspects in the scheme – one is self contribution and second is government contribution. While analysing the adequacy aspect we have observed that if the self contribution of the contributor grows at a CAGR of 8%, the minimum pension amount and corpus is achievable. And generating a return of 8% over long period by a professional fund manager is not a big issue. However, if the return is very low and the pension recipient & his/her spouse live longer, then it may put pressure on govt. to ensure guaranteed pension. But the probability of getting below 8% return with a right mix of asset over a period 20 years and more is low. Hence, the self contribution itself will take care of the guaranteed pension.

If we consider the funding liability of Govt, this will not put much pressure to Govt. as there are many limitation clauses:

a. Govt. contribution will be limited to those participants who join the scheme during June 1, 2015 to December 31, 2015.
b. Govt. contribution for the above participants will be to the extent of 50% of the individual contribution or Rs.1000/- per annum whichever is lower.
c. Contribution will be for a period of 5 years for those who joined during the initial 6 months period only.
d. The existing Swavalamban participants those who have been receiving the contribution, the benefit of government Co-contribution under APY would not exceed 5 years including those they have already received.
e. Govt. contribution will not be there for participants who are already covered under some statutory social security schemes.

Who are the other social security schemes beneficiaries not eligible to receive Government co-contribution under APY?

Beneficiaries who are covered under statutory social security schemes are not eligible to receive Government co-contribution. For example, members of the Social SecuritySchemes under the following enactments would not be eligible to receive Government Co-contribution:

i. Employees' Provident Fund & Miscellaneous Provision Act, 1952.
ii. The Coal Mines Provident Fund and Miscellaneous Provision Act, 1948.
iii. Assam Tea PlantationProvident Fund and Miscellaneous Provision, 1955.
iv. Seamens' Provident Fund Act, 1966.

v. Jammu Kashmir Employees' Provident Fund & Miscellaneous Provision Act,1961.
vi. Any other statutory social security scheme.

Among the above, majority of the subscribers are in Employees' Provident Fund and the EPF coverage status is as under:

EPF Coverage Status - The Employees' Provident Funds and Miscellaneous Provisions
Act, 1952 has covered 7,95,827 establishments and factories covered under the Act with a membership of 1178.13 lakhs under EPF Scheme, both in the Exempted and Un-exempted sectors. With effect from 01.09.2014, an employee, on joining the employment in a covered establishment and getting wages upto Rs.15,000/- is required to become a member of the fund for providing social security and timely monetary assistance to industrial employees and their families when they are in distress and/or unable to meet family and social obligations and to protect them in old age, disablement, early death of the bread winner and in some other contingencies. Presently, the following three Schemes are in operation under the Act through the Employees' Provident Fund Organisation:

1. Employees' Provident Funds Scheme, 1952
2. Employees' Deposit Linked Insurance Scheme, 1976
3. Employees' Pension Scheme, 1995

Migration of existing subscribers of Swavalamban Scheme to APY

The existing Swavalamban subscriber, if eligible, may be automatically migrated to APY with an option to opt out. However, the benefit of five years of government Co-contribution under APY would not exceed 5 years for all subscribers. This would imply that if, as a Swavalamban beneficiary, he has received the benefit of government Co-Contribution of 1 year, then the Government co-contribution under APY would be available only 4 years and so on. Existing Swavalamban beneficiaries opting out from the proposed APY will be given Government co-contribution till 2016-17, if eligible, and the NPS Swavalamban continued till such people attained the age of exit under that scheme.

7. CONCLUSIONS

A. It is adequately covering the adult population

The scheme is covering 32.20% of total population of India (as per 2011 census) and 65% of total adult population. Any person of age 18-40 years is eligible to enrol for the scheme, therefore around 39 crores population (as per Census-2011) is eligible to enrol irrespective of whether they are eligible for co-contribution from Govt. or not.

We can conclude that the null hypothesis Ho- The scheme is not covering majority of the adult population is rejected and the alternate hypothesis is accepted.

B. The amount is not adequate post retirement

1. The value of amount of pension payable (Rs.1000/-) after attainment of 60 years will be around Rs.129/- to Rs.377/- for a pension optee who has opted Rs.1000/- fixed pension post retirement and join at 18 years to 40 years of age as on date. The value of pension amount will be further come down with progression of age of the person as the pension amount remains fixed and inflation remains unabated.

2. Similarly, The value of amount of pension (Rs.5000/-) payable after attainment of 60 years will be around Rs.644/- to Rs.1884/- for a pension optee who has opted Rs.5000/- fixed pension post retirement and join at 18 years to 40 years of age as on date. The value of pension amount will be further come down with progression of age of the person as the pension amount is fixed and inflation remains unabated.

The amount of Rs.129/- per month to Rs.377/- is very meagre and will not be adequate to manage even a few days. Even Rs.644/- to Rs.1884/- is not adequate over long run. If the person lives for 75 years, the value of Rs.1884/- will be further down to Rs.906/- at the age of 75 years considering inflation of 5%.

We can conclude that the null hypothesis: Ho- The pension amount is not adequate to the recipient after attainment of retirement age at 60 years is accepted.

C. The scheme is sustainable over long run

As the Govt. commitment towards co-contribution is very limited in terms of numbers of years, in terms of amount of contribution and in terms of number of beneficiaries, the system will not put much pressure to Govt. for financial sustainability of the scheme over long run, provided the scheme generates a decent return of 8% per annum (CAGR).

We can conclude that the null hypothesis: Ho- Atal Pension Scheme will not be financially sustainable over long run is rejected, hence alternate hypothesis is accepted.

8. LIMITATION OF THE STUDY

a. There may be many adult individuals who are eligible for Atal Pension Yojana under the age group of 18-40 years but may not have the capacity to make even the nominal monthly charges which we have not considered while analysing the adequacy of coverage.

9. OBSERVATIONS & SUGGESTIONS

1. **Govt. should give minimum guaranteed corpus or the accumulated corpus whichever is higher to the nominee.**

a. There is a guarantee on monthly pension amount but the corpus payable to nominee is not guaranteed and indicative only. The indicative minimum corpus calculated is @8% CAGR. Whereas, prudent fund management can deliver more than 8% returns which will have positive impact on corpus and mismanagement will have negative impact. The actual guarantee needs to be not only on Pension amount but also need to be on corpus with minimum of 8% CAGR which will provide a sense to the guaranteed pension. We can observe that if the returns increases just by 2%, the corpus just gets doubled for a person who joins the scheme at a tender age of 18 years.

2. **Much clarity to subscribers to decrease or increase pension amount midway**

a. Provision of option to increase or decrease the monthly contribution for higher or lower pension amount is there and can be exercised once in a year but how it will impact his corpus amount is not clarified in the APY documents as fund contributions will be different for different period.

b. As retirement planning is long term and the subscriber's income will likely to go up over a period of time, the enhancement from lower amount to higher amount need to be seamless with enhanced benefits to the subscriber and this point need to be emphasized at the time of initial subscription.

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3. **Maintaining Consistency**

a. Retirement Planning is long term and need to be properly communicated and understood by the general public. Closing one or other such schemes with change in Government at centre will erode public faith on such schemes and will have adverse impact. Swavalamban scheme was launched by UPA Govt for unorganised sector but present Govt closed the scheme, though tactfully accommodated in APY.

b. The policies on such long term plans affecting public need to be dealt cautiously and consistency of regulations, monitoring, communication & promotion of such schemes is a key to success.

c. Regulators who are permanent need to have upper hand while meddling with such schemes.

This is a much needed step towards creating awareness for retirement planning for general public as well as employees of unorganised sectors. This is first universal contributory pension schemes for general public with a Govt. guarantee on pension amount. Even though, the Govt.'s contribution towards the retirement solution is meagre, it can play a constructive role in promoting it and giving a shape to the Indian pension market. Unorganised workers who spent small amounts on trivial items, addictive items if can be channelized towards long term savings will not only help the subscriber but also the economy in long run. Much depends on the way the scheme is implemented, awareness created at each points of presence, the timely information and servicing of the subscribers and fund performance of the scheme.

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