IDENTIFYING FACTORS INFLUENCING SUBSCRIBERS' PERCEPTION TOWARDS INVESTMENT IN NATIONAL PENSION SCHEME

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Abstract   *NPS is South Asia's first defined contribution pension scheme that provides various facilities, such as personal retirement account, scheme choices, professional fund management institutes, and account transfer option to the organised as well as the unorganised sector of the country. The study seeks to explore the factors influencing investment in NPS and to examine the perception of NPS subscribers in the organised as well as the unorganised sector, in terms of socio-economic factors. Exploratory factor analysis, t-test, and one-way ANOVA were used to analyse the data. The study revealed that the unorganised sector respondents are more in favour of NPS than those in the organised sector. It was also observed that gender, age, and monthly income have a significant relation with factors of NPS in both the sectors, but education qualification does not show any significant relation with NPS factors in the organised sector. The paper has implications for the government, fund managers, and pension policy makers.*

Keywords: *NPS, Organised Sector, Unorganised Sector, Socio-Economic Factors, Subscribers' Perception*

INTRODUCTION

On the basis of population and working population, India is second in the world (Population Census Survey, 2011). There is continuous increase in the elderly population in India and in 2011, this increment was approximately 8.6%, against the 5.6% in 1961. The number of elderly persons (more than 60 years) reached 104 million up to the year 2011 (Population Census Survey, 2011). Decrease in fertility rate and increase in life expectancy are two main reasons behind increase in grey population globally (India Ageing Report by UNFPA, 2017; Bhambure, 2013). Ageing population is an inevitable and irreversible socio-economic reality that demands better health and medical care facilities (India Ageing Report by UNFPA, 2017). Retirement security is the only way to overcome the problem of increasing ageing population. Pension and personal savings of individuals lead to retirement security (Eronimus, 2015). Personal savings act as supplementary income for unexpected expenses. According to the Cambridge English Dictionary, pension is an amount of money paid by the government or a private concern on a regular basis to a person who does not work any longer due to old age or illness. Pension provides the financial security, as well as stability, to an individual after retirement, without compromising on standard of living on those days when one does not have any fixed source of income (Singh, 2014). Hence, the pension system of any country

plays a key role in the financial and social well-being of its grey population, and helps maintain the standard of living, allowing people to lead a dignified life after retirement. Conventionally, the Indian pension system has been funded by employer and employee contributions, which covered only the organised sector of the country. However, only 12-15% of the population working in the organised sector comes under any form of pension scheme (Investment and Pension Asia, 2010; PFRDA SC Report, 2011; Imam, 2011; Barik & Jyothsna, 2015; Sapna, 2015; Mahanti, Tripathy & Sundaray, 2017).

Section 2 (l) of the Unorganized Workers Social Security Act, 2008, defined that the unorganised sector is where production activities are done by self-employed or home-based workers, either by establishing an enterprise or individually. Any enterprise in the unorganised sector cannot hire more than ten workers. Any other kind of worker who is providing services on behalf of a registered organisation of the central or state government comes under the organised sector.

To overcome the problem of low coverage of old pension schemes, and to provide old-age benefits to the unorganised sector as well, the government launched the New Pension Scheme on 1 Jan. 2004. NPS was South Asia's first defined contribution (DC) pension scheme (SBI Pension Fund; Eronimus, 2015) that provides various facilities, such as personal retirement account, scheme choices, professional

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fund management institutes, and account transfer options. Earlier, NPS was started only for central government employees; however, in 2009, it was opened for every citizen of the country on a voluntary basis, and renamed the National Pension System. Under the NPS, an individual has to invest regularly in their NPS account, and after the age of 60, the individual receives 60% of the total corpus as a lump sum, and the remaining 40% in the form of a monthly fixed pension.

NPS is on its initial stage yet. Nevertheless, it has shown a tremendous growth in asset under management and number of subscribers. As on 31-3-2019, the total number of subscribers under the National Pension System was 273.55 lakhs, with a total Asset Under Management of ₹3,18,214 crores (npstrust.org.in).

Architecture of NPS

Two types of accounts can be opened under NPS: Tier I account and Tier II account.

Tier I account is mandatory, funded by 10% of Basic plus DA (Dearness Allowance) from each party, i.e., government and employee. An investor can invest their money as per their own option of investment (a maximum of 50% in equity, and the other in corporate bonds or government securities). However, this option is not available for the government sector employees due to the predefined pattern of their investment by PFRDA (85% in fixed income instruments and 15% in equity and equity-linked mutual fund). Government employees can invest in tier II account with the full option of investment like all the other investors. There is tax concession under this tier I account under section 80 CCD(1) on employee's own contribution, under section 80 CCC(2) on employer contribution, and overall deduction under section 80 C.

Tier II account is a voluntary account and investors can withdraw their money at any time. There are no tax concessions under this account.

Investment Options under NPS

Investment option for organised sector employees:
- Central government scheme for central government employees.
- State government scheme for state government employees.

Investment option for unorganised sector individuals:
- All citizen schemes
- Scheme E (investment in equities; maximum of up to 50%).

- Scheme C (investment in corporate bonds).
- Scheme G (investment in government securities).

For weaker sections of society
- NPS Swalambhan / NPS Lite scheme
- Atal Pension Yojana

The structure of the present research involves five sections. The first section consists of the introduction; the next section involves the review of literature; third section consists of research methodology and hypothesis formulation; fourth section presents the results; fifth section is about discussions and conclusion; and the sixth section involves the implications of the study.

REVIEW OF LITERATURE

NPS is South Asia's first defined contribution (DC) pension scheme (SBI pension fund; Eronimus, 2015) that facilitates retirement saving options for organised as well as the unorganised sector workers of the country. Kumah, Botsie and Boachie et al. (2017) revealed that level of pension coverage of informal sector workers is very low. Only 36.8% of the informal sector workers in Nairobi were covered by the formal pension schemes (Ade, 2013). After the implementation of NPS, the unorganised sector of the country also gained the benefits of pension in old age (Pension Fund Regulatory and Development Authority). Njogu (2014) conducted a research examining employee perception of the defined contribution pension scheme in the public sector and concluded that the DC scheme has failed to meet the expectations of employees, as the employees did not know the benefits of this scheme in advance. Eronimus (2015) observed that a majority of central, state, and private sector employees are not in favour of NPS due to its link with the stock market and are not satisfied with the NPS investment. Kapoor (2018) concluded that a majority of the respondents in the unorganised sector were satisfied with the returns and benefits that are provided under the National Pension Scheme (NPS). Joo and Pauwels (2002) found that working men, compared to women; respondents who were younger and had higher levels of education, higher levels of income, positive financial attitudes and behaviours, lower level of risk aversion, and received employer financial education had higher levels of retirement confidence. Mansor et al. (2015) examined the significance of socio-economic factors in determining retirement planning among the health sector-based employees. It has been revealed that age, education level, and household income had a significant relation with retirement planning, but that gender has no significant relation with retirement planning. While Sadiq and Ishaq (2014) found that socio-economic factors such as academic education, income level, investment knowledge,

and investment experience affect the investor's level of risk tolerance, investors' gender, marital status, occupation, and family size showed no effect on investors' risk tolerance. Idrizi and Shahini (2018) analysed the impact of economic and socio-economic factors on retirement risk and concluded that economic and socio-economic factors have an impact on pension planning. Ade (2013) recommended that the government, RBA, and NSSF should undertake extensive education campaigns to educate the informal sector workers on the importance of membership to retirement benefits/ pension schemes as a means to secure their old age. It has also been suggested that necessary policy and institutional reforms should be made to make accessible retirement pension services to the informal sector workers. Eronimus (2015) suggested that a minimum guaranteed pension, increase in NPS awareness, withdrawal facility in Tier 1 account, tax exemption at the time of maturity, and so on can satisfy the workers of the organised sector. Rubinstein-Levi and Kedar-Levy (2019) revealed that the state should provide individuals a solution to the problem in the form of professional advice on behalf of the state, to enhance pension savings.

RESEARCH METHODS

Objectives

The objectives of the study are twofold: Firstly, to explore the influencing factors while investing in NPS, and secondly, to examine the perception of NPS subscribers in the organised and unorganised sector in terms of socio-economic factors.

Sample Area and Sampling Technique

Population of the study was NPS subscribers in India. Due to time and money constraints, the study has been limited to the state of Punjab. Majha, Malwa and Doaba are the three belts of Punjab that represent the whole state of Punjab. Sample has been taken on the basis of population. Each district (Amritsar, Ludhiana & Jalandhar) has been chosen with more population from these three belts of Punjab. Purposive sampling technique was used to gather data from NPS subscribers.

Data Collection Tool and Sample Size Determination

Data has been gathered, with the help of a self-framed questionnaire, from NPS subscribers in the organised and unorganised sector. In the organised sector, central and state government employees covered under NPS were targeted,

and from the unorganised sector, voluntary subscribers have been chosen. The questionnaire was framed by taking the statements from literature (Eronimus, 2015; Mahanti, Tripathy & Sundaray, 2017; Sapna, 2014; Njogu, 2014). Around 23 observations have been included in the questionnaire for NPS perception. Minimum sample size should be 5 times the total observations (Hair, Black, Babin & Anderson, 2010), i.e., 115 observations. However, to retain the assumption of reliability, 384 questionnaires were handed over personally to NPS subscribers (192 each in the organised and unorganised sector). Only 370 were received, out of which 20 questionnaires were unfilled and incomplete. Therefore, 350 questionnaires were used for further analysis. Hence, the sample size for the present study was 350, which was far more than the minimum sample size requirement of 115 to run EFA.

Tool and Techniques for Data Analysis

Exploratory factor analysis was applied on the 23 observations using the principle component analysis (PCA) method; orthogonal rotation (Varimax) was used to maintain the axes of factors at 90 degrees (Hair, Black, Babin & Anderson, 2010). The SPSS version 21.0 was employed to check reliability with Cronbach's alpha; EFA was used to explore factors of NPS; and ANOVA to investigate the relationship between factors of NPS and socio-economic factors.

Hypothesis Formulation

National Pension Scheme is an investment avenue for retirement. Various previous studies revealed that socio-economic factors such as gender, age, educational qualification, and income play a crucial role while making decisions for retirement investment (Petkoska & Earl, 2009; Mansoor, Hong, Abu & Shaari, 2015; Joo & Pauwels, 2002). On the basis of previous literature, gender, age, educational qualification, and monthly income have been selected to evaluate the relationship between various factors of NPS and socio-economic factors.

Type of Sector (Organised and Unorganised Sector)

Perception regarding any pension scheme may be different for government sector employees in the organised sector and self-employed persons in the unorganised sector. Some previous studies by Eronimus (2015) and Rangarajan and Saravanan (2019) found that NPS perception in the organised sector is low. The studies conducted by Kapoor (2018) and C & R. (2019) in the unorganised sector found

that subscribers' perception is positive regarding NPS. Hence, it is expected here that NPS perception is not similar between the organised and unorganised sector respondents and the hypothesis has been framed as follows.

H1: There is a significant difference between the organised and unorganised sector regarding various dimensions of NPS perception.

Gender

Gender is a significant socio-economic variable that plays an important role while making investment decisions for retirement. Several former research found that perceptions of men and women are different for different aspects, such as the propensity to take risk (Eronimus, 2015; Joo & Pauwels, 2002). It is evident from previous studies that women have less risk-bearing capacity than men (Bashir & Ahmed et al., 2013; Borghans & Golsteyn et al., 2009; Clark & Strauss, 2008). The study conducted by Eronimus (2015) found that women expect more returns from NPS than men. It has been observed that retirement confidence is different for male and female respondents (Joo & Pauwels, 2002). Hence, it is expected here that perception regarding various dimensions of NPS is not similar between male and female respondents.

H2: There is a significant difference between male and female respondents regarding various dimensions of NPS perception.

H2(a): There is a significant difference between male and female respondents regarding various dimensions of NPS perception in the organised sector.

H2(b): There is a significant difference between male and female respondents regarding various dimensions of NPS perception in the unorganised sector.

Age

Age is also a socio-economic variable used to examine the retirement behaviour. It has been found that people below 43 years of age mainly invest in pension plans in mutual funds (Alexander et al., 1998). It is also investigated that the purpose of investment in pension schemes may be different according to the age (Singh, 2014). Several former studies showed that young investors are more interested in high-risk and high-growth funds than the middle-age or elderly investors (Alanko, 2009; Alkhaldi & Alhammouri, 2017; Bodie & Crane, 1997; McInish, 1982; Strong & Taylor, 2001). The study conducted by Lee & Law (2004) found that initiatives to take retirement decisions increases with age. Therefore, on the basis of the above discussions it can be expected that perception regarding various dimensions of NPS is not similar across different age groups.

H3: There is a significant difference among different age groups regarding various dimensions of NPS perception.

H3(a): There is a significant difference among different age groups regarding various dimensions of NPS perception in the organised sector.

H3(b): There is a significant difference among different age groups regarding various dimensions of NPS perception in the unorganised sector.

Educational Qualification

Education of an individual determines their financial awareness about various investment alternatives. Petkoska and Earl (2009) showed that health planning for retirement is different among people with different education levels. Eronimus (2015) explored that expected returns and benefits from NPS are more in the case of respondents with a higher educational qualification. It has been found in the previous studies that people with a higher education qualification invest more in pension schemes linked with the capital market due to better knowledge (Guiso et al., 2003; Haliassos & Bertaut, 1995; Lutfi, 2010). Hence, we can assume that perception concerning various dimensions of NPS is not similar among the respondents with different levels of educational qualification.

H4: There is a significant difference among the respondents with various levels of educational qualification regarding various dimensions of NPS perception.

H4(a): There is a significant difference among the respondents with various levels of educational qualification regarding various dimensions of NPS perception in the organised sector.

H4(b): There is a significant difference among the respondents with various levels of educational qualification regarding various dimensions of NPS perception in the unorganised sector.

Monthly Income

Income is the main source of any investment. Generally, it has been seen that people with higher income are more involved in investments activities. Mitchell et al. (2006) and Gerrans (2012) found that income was positively related to choice of retirement decisions. An investment can be considered on various parameters, such as risk, returns, tax saving, benefits, and so on (Goel, 2013). Several previous studies found that people with higher income are better risk takers and invest in shares and bonds (Alkhaldi & Alhammouri, 2017; Barber & Odean, 2001; Clark & Strauss, 2008; Lutfi, 2010; Sadiq & Ishaq, 2014). Lee and Law (2004) showed that initiatives to

take retirement decisions increase with increase in income. Therefore, we can expect that perception regarding various dimensions of NPS is not similar across all the categories of monthly income.

H5: There is a significant difference among monthly income groups regarding various dimensions of NPS perception.

H5(a): There is a significant difference among monthly income groups regarding various dimensions of NPS perception in the organised sector.

H5(b): There is a significant difference among monthly income groups regarding various dimensions of NPS perception in the unorganised sector.

RESULTS

Descriptive Statistics

Out of 384 questionnaires, 350 useful questionnaires (175 each from the organised and unorganised sector) were chosen as the basis for descriptive statistics. The socio-economic profile of the respondents is shown in Table 1.

Table 1: Descriptive Statistics of Surveyed Sample

Socio-Economic Factors	Sector				Total	
	Organised Sector		Unorganised Sector			
	N	%	N	%	N	%
Gender						
Male	102	58.3	119	68	221	63.1
Female	73	41.7	56	32	129	36.9
Age						
Below 30 years	79	45.1	14	8	93	26.6
30-40 years	64	36.6	46	26.3	110	31.4
40-50 years	27	15.4	72	41.1	99	28.3
Above 50 years	5	2.9	43	24.6	48	13.7
Education Qualification						
Under-Graduate	25	14.3	32	18.3	57	16.3
Graduate	59	33.7	78	44.6	137	39.1
Post-Graduate	77	44	31	17.7	108	30.9
Professional Degree	14	8	34	19.4	48	13.7
Monthly Income						
Below 30,000	59	31.4	55	33.7	114	32.6
30,000-60,000	93	53.1	68	38.9	161	46
Above 60,000	23	13.1	52	29.7	75	21.4

Source: Primary Data.

Analysis of Factors of NPS Perception

Reliability Analysis

Cronbach's alpha (Cronbach, 1951) is a coefficient of reliability that is used most widely to analyse the reliability. Cronbach's alpha ranges from 0 to 1.00, with values close to 1.00 indicating high consistency. Generally accepted lower limit of alpha is 0.7 (Field, 2005). In the present study, reliability analysis has been diagnosed on 23 scale variables for perception; value of Cronbach's alpha was found to be 0.802. It indicates that the questionnaire and the feasibility proved good at 80.2% and further analysis can be carried out.

Exploratory Factor Analysis

Before moving ahead with factor analysis, some standard values should be examined for the appropriateness of factor analysis. Firstly, KMO coefficient must be ≥ 0.5 (Malhotra, 2018). More KMO value shows more appropriateness (Coakes & Ong, 2011). Bartlett's test examines whether the population correlation matrix is an identity matrix; each variable correlates perfectly with itself ($r = 1$), but has no correlation with other variables ($r = 0$) (Malhotra, 2018, p. 602). Secondly, the communality table shows the proportion of variance explained by the extracted factors (Field, 2009). It should be ≥ 0.5 for each variable (Hair et al., 2010). Thirdly, the primary norm for the practical significance of EFA is factor loading. Factor loading should be ≥ 0.4 (Field, 2009). In the present study, factor loadings have been selected on the basis of the sample size (Hair et al., 2010). All the statement variables with a factor loading of 0.40 or greater were considered.

Results for EFA

KMO = 0.839; Bartlett's test of sphericity: Chi square = 3048.588, df = 210, $p < 0.001$. Two variables (V18 and V21) with communalities less than .50 have been eliminated (Hair et al., 2010). All the values are more than the standard values for the appropriateness of EFA. Hence, further analysis can be done.

Table 2: Exploratory Factor Analysis Results

Variables	Factors					Communality
	1	**2**	**3**	**4**	**5**	
V4	.746					0.614
V13	.733					0.603
V14	.815					0.683
V17	.624					0.583
V20	.631					0.508
V23	.776					0.635
V1		.773				0.698
V2		.821				0.708
V3		.786				0.672
V9		.624				0.525
V10		.763				0.636
V6			.761			0.586
V11			.848			0.728
V12			.736			0.558
V22			.82			0.678
V8				.872		0.768
V15				.805		0.704
V16				.843		0.731
V5					.846	0.747
V7					.779	0.68
V19					.726	0.637
Cronbach's Alpha (> 0.7)	0.852	0.86	0.802	0.806	0.761	Cumulative Variance
CR (> 0.7)	0.867	0.869	0.87	0.878	0.827	
AVE (> 0.5)	0.524	0.572	0.628	0.706	0.616	65.15%

Source: SPSS Output.

Naming the Factors of NPS

Factor 1 consists of six variables related to structure of NPS; it is named 'Structure'.

Factor 2 includes five variables related to benefits provided by NPS; it is named 'Benefits'.

Factor 3 includes four variables related to subscribers' demand for improvement in various aspects of NPS; it is named 'Improvement'.

Factor 4 involves three variables related to risk involved in NPS; it is named 'Risk'.

Factor 5 involves three variables that are related to tax-saving benefits under NPS; it is named 'Tax saving'.

Discriminant Validity Results

Square root of all the constructs' AVE (diagonal elements) was greater than the correlation among constructs (off-diagonal elements) in corresponding rows and columns (Fornell & Larcker, 1981; Hair et al., 2010). Hence, all the constructs are unique, and discriminant validity was established.

Table 3: Discriminant Validity

	Structure	Benefits	Improvement	Risk	Tax Saving
Structure	0.724				
Benefits	0.495	0.756			
Improvement	−0.07	−0.041	**0.792**		
Risk	−0.081	−0.21	−0.041	**0.84**	
Tax Saving	0.333	0.418	0.019	−0.170	**0.785**

Source: Author's own calculations.

Analysis of Factors of NPS with Socio-Economic Factors

T-test has been used to study the difference between the organised and unorganised sector respondents, and both male and female respondents. MANOVA is wasteful when the dependent variables are uncorrelated (Tabachnick & Fidell, 2007; Malhotra, 2018) and separate ANOVA has been applied on each dependent variable (factors of perception) to compare among more than two groups, such as age, education qualification, income, and savings for organised and unorganised sector respondents. Results of analysis concerning the comparison of different groups have been interpreted below, one after another.

Results of difference between Socio-Economic Factors and Factors of NPS Perception

- Comparison between organised sector and unorganised sector: Independent sample t-test found that there is

a significant difference in the mean values of four of the five factors between organised and unorganised sectors: Structure (2.67Org./3.58Unorg., t = 10.60, p < 0.01), Benefits (2.77Org./3.84Unorg., t = 12.21, p < 0.01), Improvement (4.01Org./3.82Unorg., t = −2.048, p < 0.05), and Tax saving (2.95Org./3.54Unorg., t = 5.615, p < 0.01).

- Comparison between male and female: Independent sample t-test found that there is a significant difference in the mean value of Benefits (2.91Males/2.56Females, t = 2.325, p < 0.05) and Risk (3.08Males/3.42Females, t = 2.551, p < 0.05) in the organised sector. A significant difference is found in the mean value of Risk (3.01Males/3.59Females, t = 3.124, p < 0.01) in the unorganised sector.

- Comparison among different age groups: One-way ANOVA analysed that a significant different exists among different age groups with regard to Risk (F =

3.776, p < 0.05) in the organised sector, and Benefits (F = 7.573, p < 0.01) and Risk (F = 5.346, p < 0.01) in the unorganised sector.

- Comparison among different levels of education qualification: It is found from one-way ANOVA that there is no significant difference in any factor of NPS among different levels of education qualification in the organised sector. However, in the unorganised sector, there is a significant difference in the Risk factor (F = 3.973, p < 0.01) and Tax saving factor (F = 3.49, p < 0.05).

- Comparison among three income groups: One-way ANOVA results found that Tax saving (F = 3.488, p < 0.05) factor is different among the three income groups in the organised sector. Significant difference is found among different income groups in Benefits (F = 7.744, p < 0.01), Risk (F = 3.427, p < 0.05), and Tax saving (F = 13.993, p < 0.01) in the unorganised sector.

Table 4: Hypotheses Testing Results

Factors of Perception	Type of Sector	H1	H2	H3	H4	H5
Structure	Organised	Accepted	Rejected	Rejected	Rejected	Rejected
	Unorganised		Rejected	Rejected	Rejected	Rejected
Benefits	Organised	Accepted	Accepted	Rejected	Rejected	Rejected
	Unorganised		Rejected	Accepted	Rejected	Accepted
Improvement	Organised	Accepted	Rejected	Rejected	Rejected	Rejected
	Unorganised		Rejected	Rejected	Rejected	Rejected
Risk	Organised	Rejected	Accepted	Accepted	Rejected	Rejected
	Unorganised		Accepted	Rejected	Accepted	Accepted
Tax saving	Organised	Accepted	Rejected	Rejected	Rejected	Accepted
	Unorganised		Accepted	Accepted	Accepted	Accepted

Source: Author's own framework.

CONCLUSIONS AND DISCUSSIONS

Respondents from the unorganised sectors perceive that NPS has better structure, and provides more benefits and tax saving, compared to the respondents from the organised sectors. The reason behind the low perception of benefits and structure in the organised sectors can be the absence of scheme and pension fund choice options available to employees. They demand improvement in NPS, as the mean value is higher for the improvement factor. These findings are consistent with the results given by Kapoor (2018) and Eronimus (2015). Both the sectors perceive that NPS is a risky retirement investment option since it is linked with the securities market. A larger percentage of male respondents

perceive that NPS provides more benefits, compared to female respondents, while the perception regarding NPS benefits is quite low among both male and female respondents. Expectations of both male and female respondents in the organised sector are more from NPS. These findings are similar with the results of Eronimus (2015) who stated that a majority of female respondents expect more benefits from NPS in the form of returns, compared to male respondents. Female respondents' perception is higher with regard to risk involved in NPS, compared to male respondents, in both the sectors. Women have a more risk-averse nature than men (Borghans et al., 2009; Clark & Strauss, 2008; Patel & Patel, 2012; Bashir et al., 2013), and perceive that NPS is a risky retirement investment option due to its link

with the securities market. Respondents above 50 years perceive that NPS is more risky, compared to the other three age groups in the organised sector. These findings are consistent with the previous studies of Strong and Taylor (2001); Bodie and Crane (1997); McInish (1982); Alanko (2009); and Alhammouri and Alkhaldi (2017). They found that risk-taking capacity decreases as the age increases. In the unorganised sector, respondents above 50 years perceive that NPS provides more benefits and is also a tax saving instrument compared to other pension products. Generally, the income increases with age, and tax saving requirements also increase with increased income. NPS emerged as an effective tool for tax saving, as it provides a deduction of U/S 80C and an additional deduction of ₹50,000 (Malhotra & Anand, 2017; Barik, 2015). Hence, it provides more tax benefits to the subscribers. However, in the unorganised sector, respondents with an under-graduation qualification perceive that NPS is more risky. One reason behind this difference may be that people with a higher education are more prone to risk taking and invest in the capital market due to better knowledge (Lutfi, 2010; Haliassos & Bertaut, 1995; Guiso et al., 2003). Due to the low risk-taking behaviour, they perceive that NPS is a more risky investment, because funds are invested in the securities market in NPS. Post-graduate and professional degree holders perceive that NPS is the most tax-saving instrument, as the mean values are higher than that for under-graduates and graduates. Natarajan (2006) found that post-graduates and professional degree holders have more taxable income than under-graduates and graduates. More taxable income leads to more tax planning and tax saving, and NPS provides higher tax benefits and tax deduction of up to ₹1,50,000 U/S 80C and an additional deduction of up to ₹50,000 U/S 80CCD (Barik, 2015; Malhotra & Anand, 2017). It may be one reason that they perceive NPS as a tax saving investment retirement option. Respondents with higher income in both sectors perceive that NPS provides more tax benefits. Tax saving requirements increase with higher income and NPS provides tax deduction up to ₹2,00,000, which is higher than all other pension products available in the market (Barik, 2015; Malhotra & Anand, 2017). The reason behind high-risk perception among low income groups is the lower risk-bearing capacity due to low income. Previous studies found that people with higher income are risk takers and invest in shares and bonds (Alhammouri & Alkhaldi, 2017; Barber & Odean, 2001; Sadique & Ishaq, 2014; Clark & Strauss, 2008; Lutfi, 2010).

The study concluded that the organised sector respondents' perception concerning NPS is very low with regard to NPS structure, benefits, and tax saving; however, they demand that risk should be decreased in NPS. There are various reasons behind the low perception of the organised sector respondents, such as no fixed rate of pension, no asset class and fund manager choice at the time of investment, and default deduction from salary towards NPS. However, the unorganised sector is in favour of NPS benefits, structure, and tax saving benefits, because they invest voluntarily in NPS and have full choice of fund manager and asset class at the time of investing their money in NPS. Both the sectors of respondents perceive that NPS is a risky retirement investment option due to its link with the securities market. They are also in favour of improving NPS on various aspects, such as provision of fixed rate of returns and pension amount after retirement, tax exemption at the time of withdrawal, investment of funds in risk-free assets, and so on.

IMPLICATIONS

NPS is an investment option for the security of the later days of life, in the form of pension. However, its link with the security market does not serve the purpose of security after retirement. Government should invest the funds in fixed return securities so that it can provide safety after retirement by providing a fixed amount of pension. A very less percentage of the population of India are actually aware about the choice of schemes in NPS. Awareness increment programmes should be launched to create awareness among people about the benefits of NPS. NPS should be improved on numerous aspects, like providing tax exemption at the time of maturity, easy withdrawal from Tier 1 accounts, medical and family benefits after retirement, and so on. Enrolment in NPS can be increased by making some changes and enhancing awareness about NPS.

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