INVESTMENT BEHAVIOR OF PENSIONABLE AND NON-PENSIONABLE UNIVERSITY TEACHERS IN THE STATE OF TELANGANA – A COMPARATIVE STUDY

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Abstract:
The Government of India and majority of State Governments was abolished the old pension system and introduced the new pension policy since April 2004. This new pension policy is also applicable to autonomous bodies like Universities. The present study is aimed to examine the investment behavior of pensionable and non-pensionable University teachers in the state of Telangana. It is evident from the study that the mean perception of non-pensionable University teachers is greater than pensionable University teachers. This highlights that the non-pensionable University teachers are very much cautious than the pensionable University teachers.
Keywords: *Investment, Behavior, Pension, Pension Fund.*

1. Introduction

Indian saving market has been expanding over the period and there is a steady increase in individuals' savings. Due to the changes made in policies, leading to liberalization and globalization, the financial markets have experienced the product innovation, increased international integration more transparency and coordination. Due to these economic developments the Indian financial markets have found greater participation of individual investors in investment avenues.

An individual who commits money to investment products with the expectation of financial return is termed as an investor. Every individual aims at maximizing the flow of income from whatever source possible. To fulfill this objective an individual do is to undertake investing. It is a very interesting activity where people irrespective of their occupation, economic status, education and family background do investing. By foregoing consumption today and investing their savings, investors expect to enhance their future consumption possibilities by increasing their wealth by allocating money to assets that are expected to yield some gain over a period of time.

Every individual makes investment, even if the individual does not select stock, investments are still made through participation in pension scheme, opening fixed deposit accounts in bank and purchasing of insurance schemes or home. Investors choose investment alternatives that provide them with a psychological satisfaction rather than those that maximize their economic benefits. Over few years ago only, psychological factors were also found to be influencing their investment decision, causing them to behave in irrational way because investors do not make decision like the machines. They invest in financial products with emotions, passions, enthusiasms and dislikes.

One such investment is the pension fund and pension schemes where people tend to investment to plan for their retirement. Public pension schemes have long been recognized as having major economic and social implications. In addition to their obvious social welfare objective of providing adequate retirement incomes for the aged, public pension schemes can influence economic performance and capital accumulation through their effect on taxes and intergenerational transfers. Pension funds are a unique situation where individuals invest over multi-decade horizons, in order to obtain consumption in old age. All pension investment works with the fundamental pension equation" that the Contributions + Investment returns = Benefits paid to them.

Pension Policy in India has primarily and traditionally been based on financing through employer and employee participation. As a result, the coverage has been restricted to the organized sector and a vast majority of the workforce in the unorganized sector has been denied access to formal channels of old age financial support. Only about 12 per cent of the working population in India is covered by some form of retirement benefit scheme. Besides the problem of limited coverage, the existing mandatory and voluntary private pension system is characterized by limitations like fragmented regulatory framework, lack of individual choice and portability and lack of uniform standards.

With this backdrop, it is observed that the Government of India and majority of State Governments was abolished the old pension system and introduced the new pension policy since April 2004. This new pension policy is also applicable to autonomous bodies like universities. Hence, the present paper is aimed to study the investment behavior of pensionable and non-pensionable University teachers in the state of Telangana.

2. Meaning

The meaning of important terms used in this study is presented as follows:

2.1. Investment: Investment refers to commitment of funds at present, in anticipation of some positive rate of return in future. An investment is confronted with array of investment avenues like bank deposits, real estates, small savings, insurance schemes, bullions, small savings schemes, shares, bonds and debentures.

2.2. Investor: An individual who commits money to investment products with the expectation of financial return are termed as investors.

2.3. Investment Behavior: Investment behaviors are defined as how the investors judge, predict, analyze and review the procedures for decision-making, which includes investment psychology, information gathering, defining and understanding, research and analysis.

2.4. Pension Funds: A fund established by an employer to facilitate and organize the investment of employees' retirement funds contributed by the employer and employees. The pension fund is a common asset pool meant to generate stable growth over the long-term, and provide pensions for employees when they reach the end of their working years and commence retirement.

3. Review of Literature

The important studies reviewed in this study are presented as follows:

Ashraf Imam (2011): This study concludes that the Government played important role in investment performance in terms of risk and return, and pension funds are well placed to take advantage of the benefits, but pension fund typically hold low proportions equity on their

portfolios which hamper its growth but at the same time low equity proportions means more safety for pension funds.

Maarten C.J. Van Rooij (2004):This paper investigate pension preferences and the effect of individual freedom of choice on risk taking in the context of pension arrangements based on a representative survey of about 1,000 Dutch citizens. The attitude towards pension schemes and portfolio choices is explained by individual characteristics. The important conclusions drawn from the study are risk aversion is domain dependent and highest in the pension domain; the majority of respondents is in favour of compulsory saving for retirement and favors a defined benefit pension system.

Giorgiantonio and Bripi (2010): Their study identified the areas where major improvements are necessary; these areas are; the skills and competence of the trustees; the definition of tasks and responsibilities; and the handling of conflict of interests and the pertaining policies. They concluded that these are not only problems but may act as means of self-regulation which has to be further exploited and evaluated.

Ambachtsheer (2007): This study stated that the two facets (size and governance of pension funds) are strongly correlated. In fact, good governance is more easily implemented among pension funds of large dimensions; whereas, reforms of the retirement systems are more effective if there is an appropriate and efficient governance of pension funds, which promotes the growth of dimensions and reduces the impact of conflicts of interest among the various stakeholders.

Bhattacharya (2003): This study on existing pension scheme of the State Governments and the trends in pension payments and their fiscal implications and suggested to consider the feasibility of introducing necessary modifications in the existing pension schemes. It is recognized that the civil service pension schemes differ vastly from the universal social security schemes in several respects. The report concluded that while examining the social security scheme across the world, despite some differences in the features, there are many similarities that could be delineated.

Justin Fox (2013): This article discusses about the retirement risks in European countries. The Dutch pension system, long praised as the best in the world. Pension risk ultimately has to be borne by pension recipients and risk should be shared across a lot of pension recipients.

Nandita Markandan (2013): This study explains that a reform in the pension system tackles the primary problem of the financial sector in a dual manner. On the one hand introduction of private pension fund managers will ensure the large-scale mobilization of savings. This would increase the rate of savings, which would lead to a higher rate of capital accumulation, crucial for a developing country like India. It has been proved statistically that private managers are in a position to earn greater returns from their sources.

Richard P. Hinz and G. V. Nageswara Rao (2012): This paper provides an overview of the existing pension systems in India, their regulatory frameworks, an assessment of the efficacy of the system and the potential future role for private pension funds. It provides a discussion of the principles of supervision of private pension funds, international best practices in the area and their possible application to India, particularly in the context of the proposals for reform made in the recent past.

Hélène K. Poirson (2007): This paper highlights pre-conditions for the reform to kick-start financial development, including: (i) the buildup of critical mass; (ii) sufficiently flexible

investment guidelines and regulations; and (iii) concurrent reforms in capital markets. Given the limited scale of the planned reform, the key challenge for India is to achieve sufficient critical mass early on. Options to address this challenge include granting permission for existing workers to switch to the new system or outsourcing all or part of the reserves of private sector provident funds to the new pension fund managers.

Meena Chaturvedi (2012): Pension Policy in India has traditionally been based on financing through employer and employee participation. As a result the coverage has been restricted to the organized sector workers and a vast majority of the workforce in the unorganized sector has been denied access to formal channels of old age financial support. Further, the existing mandatory and voluntary private pension system is characterized by limitations like fragmented regulatory framework, lack of individual choice and portability, lack of uniform standards and non-compliance with international best practices on regulations.

4. Need for the Study

Formal pension system in India got abolished in the year 2004 by the Government of India. And thereafter every state Government is implementing their own pension schemes and funds. Through a recent survey it was found that life expectancy is expected to increase by 3 years for new generations and every 8^{th} citizen in India is a senior citizen, which indicates the growing population of senior citizens in India. And another factor to consider is the growing number of epidemics and diseases which require a financial protection during old age. Hence, an attempt is being made through investigating pension preferences and the effect of individual freedom of choice on risk taking in the context of pension arrangements based on a representative survey of University Teachers of Telangana State.

5. Objectives of the Study

The important objectives of the study are presented as follows:

(1) To study the theoretical framework of pension funds and schemes in India.

(2) To examine the investment behavior of pensionable and non-pensionable University teachers in the state of Telangana.

(3) To compare the investment behavior of pensionable and non-pensionable University teachers in the state of Telangana.

6. Hypothesis

The following null hypothesis is framed with above third objective:

H_0: There is no significant difference in the investment behavior of pensionable and non-pensionable University teachers in the state of Telangana.

7. Research Methodology

The research methodology used in this study is presented as follows:

Sources of Data: The required data is collected from the primary and secondary sources. The primary data has been collected from the University teachers in the state of Telangana in between August and September months of 2020. This data was collected by using Google form method. The secondary data is drawn from the journals and magazines.

Sample Size: Seventy seven responses were received from the University teachers. The detailed profile of University teachers were presented in the table-1.

Table-1: Demographic Profile of University Teachers				
No.	**Category**	**Number**	**Percent**	**Cumulative Percent**
01	**Sex**			
	Female	15	19.5	19.5
	Male	62	80.5	100.0
	Total	77	100.0	
02	**Age**			
	<30	06	7.8	7.8
	30-40	32	41.5	49.3
	40-50	30	39.0	88.3
	<60	09	11.7	100
	Total	77	100.0	-
03	**Marital Status**			
	Unmarried	09	11.7	11.7
	Married	68	88.3	100.0
	Total	77	100	-
04	**Highest Educational Qualification**			
	Post Graduation	11	14.3	14.3
	Ph.D.	66	85.7	100.0
	Total	77	100.0	-
05	**Department**			
	Science	10	13.0	13.0
	Arts	20	26.0	39.0
	Commerce & Business Mgt.	47	61.0	100.0
	Total	77	100.0	-
06	**University**			
	IBS	03	3.9	3.9
	JNTUH	05	6.5	10.4
	Kakatiya	14	18.1	28.5
	Mahatma Gandhi	05	6.5	35.0
	Osmania	40	52.0	87.0
	Palamur	05	6.5	93.5
	Sathavahana	05	6.5	100.0
	Total	77	100.0	-
07	**Experience (Years)**			
	<10	33	42.8	42.8
	10-20	31	40.3	83.1
	20-30	13	16.9	100.0
	Total	77	100.0	-
08	**Nature of Job**			
	Pensionable	13	16.9	16.9
	Non-pensionable	64	83.1	100.0

		77	100.0	
Source: Compiled from the primary data.				

8. Theoretical Framework

Pension funds are commonly run by some sort of financial intermediary for the company and its employees, although some larger corporations operate their pension funds in-house. Pension funds control relatively large amounts of capital and represent the largest institutional investors in many nations. Pensions broadly divided into two sectors: (A) Formal Sector Pensions and (B) Informal Sector Pensions. Formal sector pensions in India can be divided into three categories; viz those schemes that come under an Act or Statute, Government pensions and Voluntary pensions.

8.1. An Overview of Major Employer Pension Plans in India

Some of major employers' pension plans in India are presented as follows:

8.1.1. Employees' Provident Fund: The Employees' Provident Funds and Miscellaneous Provisions Act, 1952 (EPF Act) is the predominant social security legislation in India aimed at, inter alia, securing retirement benefits for employees. Currently, three schemes operate under the EPF Act: Employees' Provident Fund Scheme (EPFS), Employees' Pension Scheme (EPS) and Employees' Deposit Linked Insurance Scheme (EDLIS). Broadly speaking, the EPF Act applies to: every establishment which is a factory engaged in any industry specified by the central government and in which 20 or more persons are employed; any other establishment employing 20 or more persons which the central Government may, by notification, specify in this behalf. Voluntary coverage, any establishment employing less than 20 persons can be covered voluntarily.

8.1.2. National Pension System: The National Pension System (NPS) is an initiative by the Government of India to enable individuals to make investment decisions regarding their future and provide for their retirement through systematic savings. It is a combination of different pension plans. NPS became operational on 1st January, 2004 and was made applicable to all new employees of the central Government, except the armed forces. The Pension Fund Regulatory and Development Authority (PFRDA), with effect from 1st May 2009, made NPS available to all citizens of India, on a voluntary basis. NPS is a defined contribution scheme wherein the final corpus depends upon the contribution made by subscribers and the investment returns. In December 2011, the PFRDA introduced a corporate sector model to provide NPS to employees of corporate entities of the private and public sector enterprises. This will help the employed population in the corporate sector to avail the NPS facility through their employers.

8.1.3. Superannuation Funds: Superannuation Fund (SAF) is an employer-sponsored voluntary pension plan to facilitate pensions for employees when they retire / leave the organization. SAF can be either a defined contribution or a defined benefit scheme, depending upon the option selected by the employer. An employer may create a SAF through a Trust, by executing a Trust Deed and have the same approved by the income-tax authorities. The Superannuation trust funds could be managed internally or through an insurance service provider which is approved by the Insurance Regulatory and Development

Authority. The main objective of SAF is to accumulate a corpus and buy an annuity at the time of retirement, from an annuity service provider.

8.2. Governance Structure & Administrative Structure: The three mandatory plans are administered by Employees Provident Fund Organization and set up under the EPF Act and Central Provident Fund Commissioner appointed by the Federal Government is CEO who is usually a civil service bureaucrat and supported by Assistant and Regional Provident Fund Commissioners Central Board of Trustees is the supervisory authority and Minister of Labour is the Chairman and there is Central Provident Fund Commissioner, five Federal Government Representatives, fifteen State Government Representatives, ten Employer Representatives and ten Employee Representatives and all trustees are appointed by Federal Government after consultation. EPFO carries out Benefit Administration and Record keeping set up an extensive administration network with offices all over the country. Fund Management is contracted out to a professional fund manager and State Bank of India is presently the fund manager and there is no change in fund manager for several years.

8.3. Pension Fund Management: Pension Funds are managed by Pension Fund Administrators and they are responsible for taking investment decisions but in some jurisdictions, pension fund management can be by asset management and insurance companies and some management decisions may be the responsibility of Boards of Trustees in some corporate organizations. Pension Fund Custodians are those who keep custody of pension funds. Regulations of pension funds require the appointment of a custodian, depository institution or trustee, standards of conduct and minimum suitability of the operators of pension funds, the rights of investors to withdraw funds and the right of investors to full, timely and accurate information disclosure. Regulations required promoting both the performance and the financial security of pension assets. Main goals of pension investment are to ensure adequate, affordable and sustainable benefits to contributors, secure safety & security of funds and ensure adequate liquidity to pay all pension benefits of contributors as and when due risk management for pension assets established on quantitative limits which is maximum limits for individual, class or class of mix assets.

8.4. Investment Guidelines for Pension Fund Management: Funds are required to follow Investment Pattern prescribed by the Government according to the New Pension System: (a) Non-Government provident funds are allowed to invest 5% of assets in blue-chip shares and 10% in corporate debt and equity-oriented mutual funds. (b) Relaxation of norms for superannuation and gratuity funds to invest in the Gilt fund. Provident funds can have a maximum exposure of 5% in gilt funds at any point in time. (c) Provident Funds can invest in bonds of financial institutions and companies having investment grade from at least 2 credit rating agencies. (d) There would be multiple pension fund managers licensed by Pension Fund Regulatory and Development Authority (PFRDA) and the choice would be with the individual employees to decide which fund manager they would like to go with. (e) Under the NPS, it is proposed that there would be four broad categories of pension scheme (scheme A, B, C and D). While in scheme A, investments will be made in Government securities only, scheme D would have relatively higher weighing for equity while retaining the dominance of fixed income instruments. Schemes B & C will provide a balanced investment option with equity and fixed income instruments. (f) On the issue of guarantees on principals and/or returns, market based guarantees are proposed under the NPS scheme. This means that the

subscriber has to bear the cost of the guarantee. However, the scheme with 100% Government Securities would be totally risk free in terms of capital protection and assured returns if the securities are held to maturity. No investments allowed in (a) International Securities – Strict Capital Account Controls exist in India. (b) No Indian citizen or corporate can invest overseas. (c) Stocks – India has a large stock market. (d) Real Estate – Only Financial Assets allowed. (e) Gold – Only Financial Assets allowed. (f) No investments permitted in Bank or Corporate Deposits. (g) Investment allowed only in marketable securities. (h) No loans to individuals or Corporate. (i) Only exception is Central Government's Special Deposits.

9. Investment Behavior of Pensionable and Non-pensionable University Teachers

The investment behavior of pensionable and non-pensionable university teachers is studied in the form knowledge about the investment avenues, computation capabilities, retirement plans, savings plans, asset acquisition and risk-averse investments etc., the perception collected and presented in the table-2.

Table-2: Investment Behavior of Pensionable and Non-pensionable University Teachers

Pension			Knowledge	Computation Capability	Retirement Plan	Savings Plan	Asset Acquisition	Risk Averse
Pensionable	N	Valid	13	13	13	13	13	13
		Missing	0	0	0	0	0	0
	Mean		18.62	13.85	20.46	12.46	7.77	11.00
	Std. Deviation		8.818	7.057	8.452	3.282	1.235	5.323
	Variance		77.756	49.808	71.436	10.769	1.526	28.333
	Minimum		7	6	7	7	7	7
	Maximum		33	25	35	16	10	19
	Sum		242	180	266	162	101	143
Non-pensionable	N	Valid	64	64	64	64	64	64
		Missing	0	0	0	0	0	0
	Mean		20.38	13.25	20.05	15.48	7.44	15.73
	Std. Deviation		5.432	3.928	6.173	2.000	2.253	4.955
	Variance		29.508	15.429	38.109	4.000	5.075	24.547
	Minimum		7	6	7	11	4	7
	Maximum		28	20	31	19	12	29
	Sum		1304	848	1283	991	476	1007

Source: Compiled from the primary data.

It is evident from the table-2 is that the pensionable teachers are 13 and the non-pensionable teachers are 64. The mean perception of pensionable employees in the case of knowledge is 18.62, computation capability 13.85, retirement plan 20.46, savings plans 12.46, asset acquisition 7.77 and risk-averse 11.0. On the other hand non-pensionable employees mean perception is 20.38, 13.25, 20.05, 15.48, 7.44 and 15.73 respectively. It is concluded from the above table that the mean perception of non-pensionable University teachers is greater than pensionable University teachers. Hence, it is concluded that the non-pensionable University teachers are very much cautious than the pensionable University teachers.

10. Comparison of Investment Behavior of Pensionable and Non-pensionable University Teachers

The investment behavior of pensionable and non-pensionable University teachers is compared and presented in the table-3. The ANOVA is used to test the significant difference between pensionable and non-pensionable University teachers.

Table-3: Financial Literacy and Financial Preparedness of University Teachers

	Pension	N	Mean	Std. Deviation	Std. Error Mean
Knowledge of FI	Pensionable	13	18.62	8.818	2.446
	Non-pensionable	64	20.38	5.432	.679
Computation Capability	Pensionable	13	13.85	7.057	1.957
	Non-pensionable	64	13.25	3.928	.491
Retirement Plans	Pensionable	13	20.46	8.452	2.344
	Non-pensionable	64	20.05	6.173	.772
Savings Plan	Pensionable	13	12.46	3.282	.910
	Non-pensionable	64	15.48	2.000	.250
Asset Acquisition	Pensionable	13	7.77	1.235	.343
	Non-pensionable	64	7.44	2.253	.282
Risk Aversion	Pensionable	13	11.00	5.323	1.476
	Non-pensionable	64	15.73	4.955	.619

Source: Compiled from the primary data.

The ANOVA results are presented in the following table.

ANOVA Results

		Sum of Squares	df	Mean Square	F	Sig.
Knowledge	Between Groups	33.456	1	33.456	.899	0.346
	Within Groups	2792.077	75	37.228		
	Total	2825.532	76			
Computation Capability	Between Groups	3.840	1	3.840	.183	0.670
	Within Groups	1569.692	75	20.929		
	Total	1573.532	76			
Retirement Plans	Between Groups	1.858	1	1.858	.043	0.837
	Within Groups	3258.090	75	43.441		
	Total	3259.948	76			
Savings Plan	Between Groups	98.733	1	98.733	19.425	0.000
	Within Groups	381.215	75	5.083		
	Total	479.948	76			

Asset Acquisition	Between Groups	1.189	1	1.189	.264	0.609
	Within Groups	338.058	75	4.507		
	Total	339.247	76			
Risk Aversion	Between Groups	242.191	1	242.191	9.629	0.003
	Within Groups	1886.484	75	25.153		
	Total	2128.675	76			
Source: Compiled from the primary data.						

From the ANOVA table it is observed that the null hypothesis is rejected in the case of savings plans and risk-aversion of pensionable and non-pensionable university teachers. In the case of knowledge, computation capabilities, retirement plans and asset acquisition the null hypothesis is accepted. It means that the University teachers' perception is significantly different in the above cases.

11. Conclusion

It is evident that the mean perception of non-pensionable University teachers is greater than pensionable University teachers. This highlights that the non-pensionable University teachers are very much cautious than the pensionable University teachers. From the ANOVA table it is observed that the null hypothesis is rejected in the case of savings plans and risk-aversion of pensionable and non-pensionable University teachers. In the case of knowledge, computation capabilities, retirement plans and asset acquisition the null hypothesis is accepted. It means that the University teachers' perception is significantly different in the above cases.

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