A Study On Investors' Expected Rate Of Return On Their Investments With Special Reference To The Judicial Department Employees Of Rajkot

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INTRODUCTION

If we want a nice nest egg later on, we cannot spend all that we earn. We have to save a little and invest it wisely so that our "Golden Years" are truly golden. Everyone seems to understand this basic financial principle. Most people are investing some of their money for the future. Investment means the purchase by an individual of a financial or real asset that produces a return proportion to the risk assumed over some future investment period. For achieving this, the investor has to decide on how and where to deploy his/her savings so that his/her future requirements for money can be best met.

Until the late 1990s, a high interest rate environment characterized India. Usually, investments were made in small savings schemes such as the Post Office Monthly Income Scheme (POMIS), the term deposits or in special Government schemes such as the RBI Relief Bonds. Interest rate on Post office monthly income schemes were as high as 13.25% percent in the mid-nineties. RBI Relief Bonds returned 10% until as recently as 7-8 years ago. Thus, on a corpus of ₹10, 00,000, assuming an average interest earned on investments at 12% p.a.; one could earn ₹ 1,20,000 p.a. or ₹10, 000 per month, which could afford the investor a modest lifestyle.

All this started changing about 5-6 years ago, when the RBI started reducing interest rates to align them to globally realistic levels. As a result, the interest rate on POMIS is about 8% now, while that on the RBI relief bond, it is only 6.5%. As a result, the average interest earned may now only be about 7% per annum. Thus, on the same corpus of ₹ 10, 00,000, the interest income would only be ₹ 70, 000 p.a. or less than ₹ 6,000 per month. Clearly, this is not enough to maintain even a modest lifestyle. Such low returns have mandated a change in investment strategies required by the new low interest rate environment.

There has, however, been a mitigating factor in terms of inflation. Until the late 1990s, inflation averaged over 8%, while the average return from fixed income instruments was about 12%. Therefore, the real return from fixed return options was about 4%. In recent years, inflation has trended down to about 5%. Thus, on an average interest rate of 7% p.a., the average real return from fixed return instruments has not fallen by 5%, (the differences in nominal returns) but by 2%. Still, however, an executive retiring now will be forced to look at options beyond fixed return instruments to include mutual funds, particularly equity mutual funds.

Interest rates also change after the relative attractiveness of financial assets like shares, bonds and other fixed interest investments. Lower interest rates generally tend to cause a shift of ingestible funds from bonds, bank and company deposits to equity shares and viz-a-viz. The impact of any change in interest rates affects the way companies finance their operations. When interest rates are high, companies prefer the raise funds through issue of equity shares rather than bonds and high-cost bank loans. But in case of falling interest rates, bank loans become more attractive as a source of finance than equity. So, this means that lower interest rates are bad for the primary markets, and are good for the secondary markets. Low return investment is mostly government sponsored and secured, whereas high return investments are associated with a high degree of risks.

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EXPECTED RATE OF RETURN

The weighted average is the most likely outcome in gambling, probability theory, economics or finance.
What Does Expected Return Mean? It is the average of a probability distribution of possible returns, calculated by using the following formula:

E(R) = Sum: Probability

CLARITY OF OUTLINE

The rate of return expected on an asset or a portfolio : The expected rate of return on a single asset is equal to the sum of each possible rate of return multiplied by the respective probability of earning on each return.
For example,
If a security has a 20% probability of providing a 10% rate of return, a 50% probability of providing a 12% rate of return, and a 25% probability of providing a 14% rate of return, the expected rate of return is :

(.20)(10%) + (.50)(12%) + (.25)(14%) = 12%

The researchers' purpose behind choosing this topic for research is nothing else but it is a measure conceived and crafted in the spirit of 'forewarned is forearmed'. No self-respecting business person or organization should make an investment without first having some understanding of how successful that investment is likely to be. Expected rate of return provides such an understanding, within certain limits.

THE JUDICIAL DEPARTMENT EMPLOYEES OF RAJKOT

There are two reasons for selecting this department or conduct a research on their employees :

1) The researchers wanted to be take a sample size of Government Employees, and wanted to check out their perceptions regarding Investment and Return on the same. So, the researchers' first objective was satisfied as the Judicial Department is managed by the State Government.

2) No such Research has been conducted on this department or on their employees in this field previously. Hence, it was a novel topic of research for the researchers.

BRIEF HISTORICAL BACKGROUND OF RAJKOT, GUJARAT

In the heart of Saurashtra peninsula, Rajkot was founded in the 16th Century by Rajkot Chief Kunvar Vibhoji Jadeja. After bifurcation of Gujarat State from Bombay Bilingual State, Shri N.G.Shelat was the First District and Sessions Judge of Rajkot District during the period from 23.06.1959 to 14.10.1960.

JUDICIAL BACKGROUND OF RAJKOT, GUJARAT

At present, Rajkot has a total of two Sub Divisions viz., (1) Gondal and (2) Morbi. The Small Causes Courts are at Rajkot with Civil Judge (S.D.) Courts at Rajkot, Gondal, Morbi and Dhoraji with 9 Junior Division (J.M.F.C.) Courts and one Judicial Taluka totaling to 14 Talukas in the District. Till today, 24 District Judges have adorned the chair of the Judicial District. At present, Mr. B. M. Modi, Principal District Judge, is presiding over as a District Judge, Rajkot.

OBJECTIVES OF THE STUDY

❖ To analyze the profile of the salaried class employees of the Judicial Government Department & to ascertain their perception regarding the Expected Rate of Return.

❖ To analyze the Expected Rate of Return on the investments of the salaried class investors of the Judicial Government Department.

❖ To gain familiarity with a phenomenon or to achieve new insights into it.

❖ To test the hypotheses of a casual relationship between various variables i.e. Age & Expected Rate of Return, Gender & Expected Rate of Return, and so on.

REVIEW OF LITERATURE

While there are a number of interest rate modeling exercises available in the literature, the researchers have reviewed a few of the recent papers here. Fauvel, Paquet and Zimmermann (1999) provided an exhaustive survey of the empirical literature. Bidarkota (1998) set up a univariate unobserved components model for the realized real interest rates in the U.S. and a vicariate model for the nominal rate and inflation which imposes co-integration restrictions between them. He concluded that the error-correction model provides a more accurate one-period ahead forecast of the real rate within the estimation sample, whereas the unobserved components model yields forecasts with smaller forecast variances. A recent application of interest rate modeling can be found in Butter and Jansen (2004), who conducted an analysis of long term yields on government paper in Germany. In their model, they made an attempt to include macroeconomic variables to forecast interest rates. They used quarterly time series data from 1982 to 2001 to develop an equation for predicting yield on German 10-year government paper. While they used a variety of econometric specifications in most of the models studied by them, they found that other interest rates are important in explaining the interest rates. They found that the important variables in the modeling exercise were 3-month German Libor, Government Balance, US 10-year yield, German IFO business activity indicator, Japanese 10-year yields and Real Effective Exchange rate. The problem with these models is that they only confirm integration of world markets, but cannot be used for forecasting based on macroeconomic trends. Moreover, for the calculation of quarterly government balance, the yearly balance was divided by four, which distorted the data into the form of a step function, which may not be an appropriate proxy for quarterly government balance. There have been a few Indian exercises in interest rate modeling as well.

Dua and Pandit (2002) studied the behavior of short-term and long-term interest rates (viz. commercial paper rate, 3-month Treasury bill rate, and 12-month Treasury bill rate). Their empirical results indicated the existence of a co-integrating relationship between real interest rates, real government expenditure, real money supply, foreign interest rates and the forward premium. The estimations also showed that movements in interest rates are Granger caused by both domestic and external factors. Dua, Raje, and Sahoo (2004) developed a model which explained the 10-year government security yields in India. After this, they tried to make predictions for the next nine months. The explanatory variables used by them were the inflation rate (year-on-year), bank rate, yield spread, credit, foreign interest rate (6-months Libor), and forward premium (6- months).

Krishnamoorthi (2006) further contributed to this topic by taking a sample size of 600 employees of both the Private & the Government Sector.

HYPOTHESES OF THE STUDY

The Hypotheses of the study can be described here in as under :

1) There is no significant difference among the age groups in the average expected rate of return on their investments.

2) There is no significant difference between male and female sample investors in the expected rate of return on their investments.

3) There is no significant difference between married and unmarried sample investors in the average expected rate of return on their investments.

4) There is no significant difference among the sample investors with different Educational Qualifications in the average expected rate of return on their investments.

5) There is no significant difference among the sample investors with difference in nature of work in the average expected rate of return on their investments.

6) There is no significant difference between sample investors with employed and unemployed spouses in the expected rate of return on their investments.

7) There is no significant difference between sample investors of varied monthly income groups in the average expected rate of return on their investments.

8) There is no significant difference between sample investors with varied monthly expenses in the average

expected rate of return on their investments.

9) There is no significant difference among the sample investors with different monthly investments in the average expected rate of return on their investments.

RESEARCH DESIGN

❖ **Universe Of The Study :** The first step in developing any sample design is to clearly define the set of objects, technically called the Universe, to be studied. 100 employees working in Rajkot Judicial Department in various posts likewise Judges (In Senior & Junior both the Categories), Clerks (In Senior & Junior both the Categories), Belif, Peon, Safaiwalas (cleaning staff) and so on were taken as the respondents for the present study.

❖ **Nature Of The Study :** The study is purely based on Primary Data. The Questionnaire method was adopted for the study.

❖ **Sample Of The Study :** While developing the sampling design for a study, one is required to pay attention to the following points:

❖ **Sampling Unit:** A decision has to be taken concerning the sampling unit before selecting a sample. Here, in this study, the sampling unit was based on the District level as far as geographical aspect was concerned.

❖ **Source List:** It is also known that a 'sampling frame' is the frame from which a sample is drawn. It contains the names of all items of a universe.

❖ **Size of the Sample:** This refers to the number of items to be selected from the universe to constitute a sample. The size of the sample in this study is not too large or too small, but it is an optimum value, which fulfilled the requirements of efficiency, representativeness, reliability and flexibility. In this study, the researchers took a sample size of 100 employees.

❖ **Sampling Procedure :** The technique or procedure chosen for selecting the items for the sample stands as the sample design itself.

❖ **Data Collection :** The task of data collection begins after a research problem has been defined, and the research design has been chalked out. For the present study, primary data collection method was applied through the Questionnaire Method. The researchers handed out the Questionnaire to the selected respondents and requested them to answer the questions and return the questionnaire.

❖ **Statistical Tools For Measurement :** For analysis and interpretation of the data, "ANOVA" technique and "t-Test" was used.

LIMITATIONS OF THE STUDY

❖ The Sample Size might not reflect the true and fair view of the whole universe.

❖ Due to lack of time, the focus of the present study was only on the Judicial Department Employees of Rajkot.

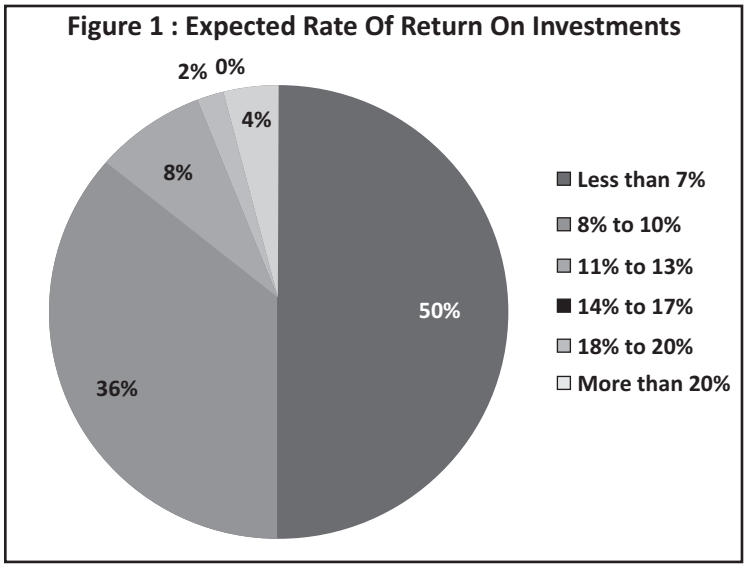
❖ In some cases, the respondents might not have answered the questions in a fair and unbiased manner, which can affect the results of the study.

DATA ANALYSIS AND INTERPRETATION

The expectation of investors with regard to rate of return is seldom fulfilled, and mostly, they receive less than the moderate level of return. In this context, it was considered very important to know the rate of return expected by the investors. An attempt was made to understand their expectations and desires with regard to expected returns on investments.

From the Figure 1, it can be ascertained that 50% of the sample investors wanted to have less than 7% Rate of Return on their investments, and it is justifiable because the selected sample size is based on Government Employees, and they mostly invested their valuable money in various post office schemes, which gives almost 7% Return on Investment. This was followed by 36% of the sample investors, who wanted 8% - 10% Return, 8% of the sample investors wanted 11% - 13% Return, 4% of the sample investors wanted to have a more than 20% Return, and 2% of the sample

investors wanted to have 14% - 17% Rate of Return on the invested portfolio.

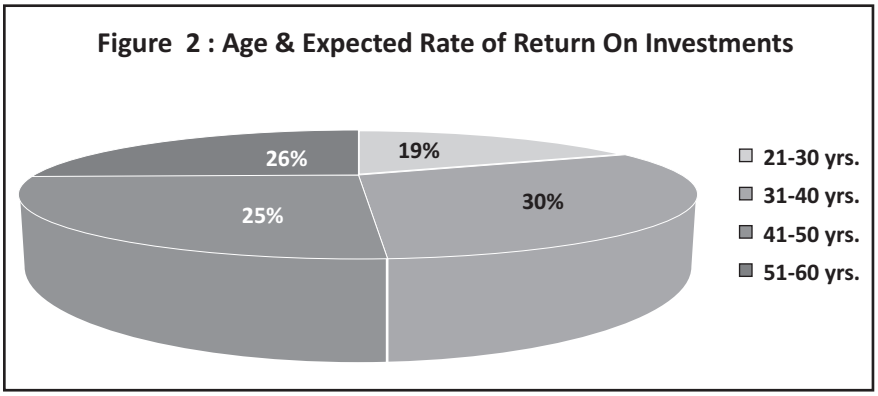


AGE & EXPECTED RATE OF RETURN ON INVESTMENTS

As age increases, the responsibilities on a person also multiply, and so does the desire to earn more. As one grows, his commitments also increases simultaneously, resulting in want of more funds for living. Hence, age of investors may influence them to expect a return at a particular rate. The role of the age of investors with regard to expected rate of return was analyzed, and the relevant particulars are presented in the Table 1 and Figure 2.

Table 1: Age & Expected Rate of Return On Investments

Age/ERR	Less than 7%	8% to 10%	11% to 13%	14% to 17%	18% to 20%	More than 20%	TOTAL
21-30 yrs.	8	8	1	1	0	1	19
31-40 yrs.	18	8	3	0	0	1	30
41-50 yrs.	12	9	3	0	0	1	25
51-60 yrs.	12	11	1	1	0	1	26
TOTAL	**50**	**36**	**8**	**2**	**0**	**4**	**100**



From the Table 1 and Figure 2, it is ascertained that 30% of the sample investors were aged between 31-40 years, 26% of the sample investors were aged between 51-60 years, 25% of sample investors were aged between 41-50 years, and 19% of the sample investors were aged between 21-30 years. Out of this sample, 60% of the sample investors aged between 31-40 years wanted to have less than 7% Rate Of Return on investments, 46% of the sample investors aged between 51-60 years wanted to have less than 7% returns, 48% of the sample investors aged between 41-50 years wanted to have less than 7% returns, and 42% of the sample investors aged between 21-30 years wanted to have less than 7%, and 8% -10% Rate Of Return on their invested portfolio.

On the above-mentioned data, ANOVA test (Single Factor) was applied. The analysis of the tested data can be described herein as under.

❖ **Level Of Significance & Degree Of Freedom :** Critical value of the table at 5% level of significance for 99 degrees of freedom = 2.70.

Table 2: ANOVA Test On Age & Expected Rate of Return On Investments

Source of Variation	SS	df	MS	F	F crit
Between Groups	2.48	3.00	0.83	2.69	2.70
Within Groups	29.52	96.00	0.31		
Total	**32.00**	**99.00**			

Single factor ANOVA was applied to find whether there is any significant difference between the age groups in the average expected Rate Of Return on investments. The ANOVA results show that the calculated F-Ratio value is 2.69, which is less than the table value 2.70 at 5% level of significance. Since the calculated value is less than the table value, it is inferred that there is no significant difference between the age groups in the average expected Rate Of Return scores on investments. Hence the Hypothesis 1 is accepted (Table 2).

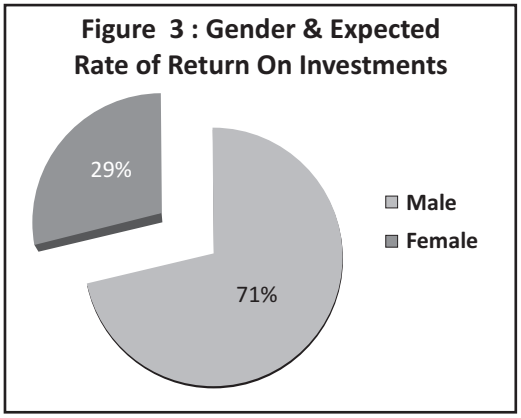
GENDER & EXPECTED RATE OF RETURN ON INVESTMENTS

Nowadays, women are earning at par with men. Their earning capacity has increased and that enables them to construct their own investment portfolio. A general opinion is that women expect a higher rate of return than men.

Table 3: Gender & Expected Rate of Return On Investments

Gender/ERR	Less than 7%	8% to 10%	11% to 13%	14% to 17%	18% to 20%	More than 20%	TOTAL
Male	39	23	5	1	0	3	71
Female	11	13	3	1	0	1	29
TOTAL	**50**	**36**	**8**	**2**	**0**	**4**	**100**

Figure 3 : Gender & Expected Rate of Return On Investments



Moreover, when they earn, their spending behavior is influenced by their income. Common thinking is that working women spend more than the housewives. In this regard, whether the male and female respondents showed any significant association in expected Return On Investment, an analysis was conducted, and the results are presented in the Table 3 and Figure 3 .

Table 4 :'t' Test On Gender & Expected Rate of Return		
Particulars	**Male**	**Female**
Mean	11.83	4.83
Variance	248.97	32.17
Observations	71.00	29.00
Pearson Correlation	0.90	
Df	99.00	
t Stat	1.57	
t Critical two-tail	1.96	

From the Table 3, it can be ascertained that 55% of the male sample investors and 38% of the female sample investors expected less than 7% return on their investments, 45% of the female sample investors & 32% of the male sample investors expected 8%-10% return on their investments, 10% of the female sample investors & 7% of the male sample investors expected 11% - 13% return on their investments, 4% of the male sample investors & 3% of the female sample investors expected more than 20% return on their investments, and 3% of the female sample investors & 1% of the male sample investors expected between14% - 17% return on their investments.

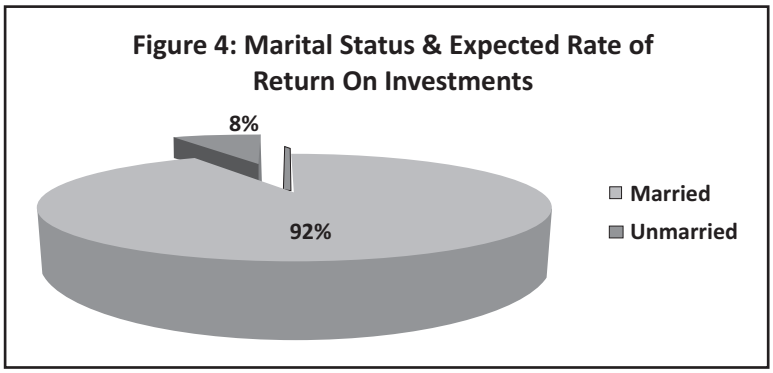
The two tailed 't'-Test was applied to find whether there is a significant difference between male & female sample investors in the average expected Rate Of Return on their investments' scores. The calculated 't'-Test value is 1.57, which is less than the table value of 1.96 at 5% level of significance. Since the calculated value is less than the table values, it is inferred that there is no significant difference between male and female sample investors in the expected Rate Of Return on their investments. Hence, the Hypothesis 2 is accepted (Table 4).

MARITAL STATUS & EXPECTED RATE OF RETURN ON INVESTMENTS

Generally, it is a common belief that an unmarried human being is having less responsibility than a married one, and accordingly, an unmarried person can save more money. A married person is likely to became risk averse, and accordingly invest his valuable money in risk free securities and park such securities in his or her portfolio. So, it is likely that a married person's expectation of returns from such a portfolio will be lower. On the other hand, unmarried persons can bear more risks, and accordingly, they may invest in risky securities which generate higher Rate of Return on investments. Numerical possibilities of such situations are shown herein in the Table 5 and Figure 4.

Table 5: Marital Status & Expected Rate of Return On Investments							
Marital Status/ERR	**Less than 7%**	**8% to 10%**	**11% to 13%**	**14% to 17%**	**18% to 20%**	**More than 20%**	**TOTAL**
Married	47	33	7	1	0	4	92
Unmarried	3	3	1	1	0	0	8
TOTAL	**50**	**36**	**8**	**2**	**0**	**4**	**100**

From the Table 5, it is ascertained that 51% of the married sample investors & 38% of the unmarried sample investors expected less than 7% Rate of Return on their investments, 38% of the unmarried sample investors & 36% of the married sample investors expected 8% - 10% Rate of Return on their investments, 13% of the unmarried sample investors & 8% of the married sample investors expected 11% - 13% Rate of Return on their investments, 13% of the unmarried sample investors and 1% of the married sample investors expected 14% - 17% Rate of Return on their investments, and 4% of the married sample investors expected more than 20% Rate of Return on their investments.



The 't'-test was applied to find whether there is a significant difference between married and unmarried sample investors in the average expected Rate Of Return on their investment scores. The calculated 't'-test value is 1.85, which is less than the table value of 1.96 at 5% level of significance. Since the calculated value is less than the table value, it is inferred that there is no significant difference between married and unmarried sample investors in the expected rate of return on their investments. Hence, the Hypothesis 3 is accepted (Table 6).

Table 6: 't' test On Marital Status & Expected Rate of Return

Particulars	Married	Unmarried
Mean	15.33	1.33
Variance	390.67	1.87
Observations	92.00	8.00
Pearson Correlation	0.93	
df	99.00	
t Stat	1.85	
t Critical two-tail	1.96	

EDUCATIONAL QUALIFICATIONS & EXPECTED RATE OF RETURN ON INVESTMENTS

Generally speaking, educated people expect a high return because of their qualification, knowledge and so on. It was presumed that educated investors expect a moderate Rate of Return on their investments than the uneducated ones. Hence, an attempt is made to ascertain whether investors with varying educational backgrounds show any significant difference in expecting Returns on Investment, and the data is presented in the Table 7 and Figure 5.

From the Table 7 and Figure 5, it is ascertained that 49% of the sample investors were Graduates and expected 8% - 10% Rate of Return on their investments, 71% of the sample investors were less than graduates, and expected less than 7% Rate of Return on their investments. 48% of the sample investors were post graduates and expected less than 7% Rate of Return on their investments.

On the above-mentioned data, ANOVA test (Single Factor) was applied. The critical value of the table at 5% level of significance for 99 degrees of freedom = 1.72.

Single factor ANOVA was applied to find whether there is any significant difference between the educational qualifications of the respondents and the average expected Rate of Return on investments. The ANOVA results show that the calculated F-ratio value is 0.52, which is less than the table value of 1.72 at 5% level of significance. Since the calculated value is less than the table value, it is inferred that there is no significant difference between the educational qualifications of the respondents and the average expected Rate of Return on investments . Hence, the Hypothesis 4 is accepted (Table 8).

Table 7: Educational Qualifications & Expected Rate of Return On Investments							
Edu. Quali./ERR	**Less than 7%**	**8% to 10%**	**11% to 13%**	**14% to 17%**	**18% to 20%**	**More than 20%**	**TOTAL**
Less than Graduation	24	8	1	0	0	1	34
Graduation	14	20	4	2	0	1	41
Post Graduation	12	8	3	0	0	2	25
Professional Qualification	0	0	0	0	0	0	0
Other	0	0	0	0	0	0	0
TOTAL	**50**	**36**	**8**	**2**	**0**	**4**	**100**

Figure 5: Educational Qualifications & Expected Rate of Return On Investments

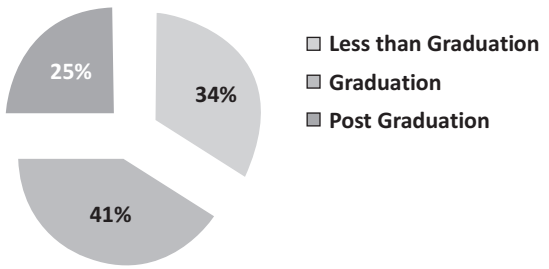


Table 8: ANOVA Test On Educational Qualifications & Expected Rate of Return					
Source of Variation	**SS**	**df**	**MS**	**F**	**F crit**
Between Groups	13.20	19.00	0.69	0.52	1.72
Within Groups	106.80	80.00	1.34		
Total	**120.00**	**99.00**			

NATURE OF WORK & EXPECTED RATE OF RETURN ON INVESTMENTS

It is said that your status makes a lot of difference in your overall personality and clarity of thoughts. The same logic can be applied over here, where status can be considered to be the designation of the sample investor. According to the designation of the person, he or she will be likely to get perks & benefits and hence, can save more according to his/her income level. As said earlier, due to higher status, the thinking level is likely to be higher. Hence, such investors invest in various available securities in the market to get a higher rate of return. So, the different perceptions of such investors can be seen in the Table 9. The Figure 6 and Table 9 reveals that 57% of the sample investors belonged to the Junior Clerk category, out of which, 53% of the sample investors expected less than 7% Rate of Return on their investments, 17% of the sample investors belonged to the Senior Clerk category, out of which 47% of the sample investors expected less than 7% Rate of Return on investments, and 47% of the sample investors expected 8% -10% Rate of Return on their investments. 14% of sample investors belonged to the lower hierarchy - the peons and cleaning staff . In this category, 79% of investors expected less than 7% Rate of Return on their investments. 12% of the sample investors belonged to stenographer category, out of which, 42% of the sample investors expected 8% - 10% Rate of Return on their investments.

So, the critical value of the table at 5% level of significance for 99 degrees of freedom = 1.66.

Single factor ANOVA was applied to find whether there is any significant difference between the nature of work and the average expected Rate of Return on investments. The ANOVA results shows that the calculated ratio value is 0.18, which is less than the table value of 1.66 at 5% level of significance. Since the calculated value is less than the table

value, it is inferred that there is no significant difference between the nature of work of the sample investors and the average expected Rate of Return scores. Hence, the Hypothesis 5 is accepted (Table 10).

Table 9 : Nature Of Work & Expected Rate of Return On Investments

Design. Poss./ERR	Less than 7%	8% to 10%	11% to 13%	14% to 17%	18% to 20%	More than 20%	TOTAL
Peon	11	3	0	0	0	0	14
Jr. Clerk	30	20	5	1	0	1	57
Sr. Clerk	8	8	0	1	0	0	17
Stenographer	1	5	3	0	0	3	12
TOTAL	**50**	**36**	**8**	**2**	**0**	**4**	**100**

Figure 6: Nature Of Work & Expected Rate of Return On Investments

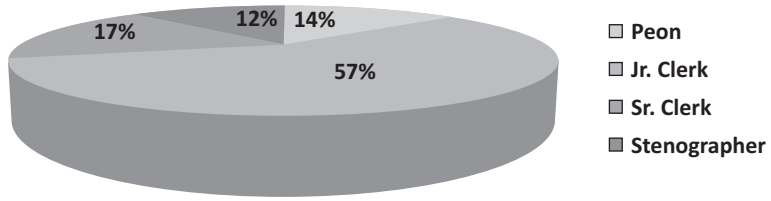


Table 10: ANOVA Test On Nature of Work & Expected Rate of Return

Source of Variation	SS	df	MS	F	F crit
Between Groups	5.50	24.00	0.23	0.18	1.66
Within Groups	94.50	75.00	1.26		
Total	**100.00**	**99.00**			

EMPLOYMENT STATUS OF THE SPOUSE & EXPECTED RATE OF RETURN ON INVESTMENTS

There is a saying that *"Four eyes can see better than two"*, this proverb can be applied in the case of the income perspective. If your better half is earning with you, than it is likely that your overall income will be on the higher side, and due to that, you would save more, and if you are saving more, then it is likely that you will be investing more, and more investment will generate a greater Rate of Return on investments. From the Figure 7 and Table 11, it is observed that 77% of the sample investors' spouses were not employed, and 33% of the sample investors' spouses were employed. Out of which, 49% of the sample investors' spouses, who were unemployed, expected less than 7% Rate of Return on their investments, 52% of the sample investors' whose spouses were employed, expected less than 7% Rate of Return on their investments, 35% of sample investors', whose spouses were unemployed, expected 8% - 10% Rate of Return on their investments, and 39% of sample investors', whose spouses were employed, expected 8% - 10% Rate of Return on their investments. On the above mentioned data, two tailed 't'- test was applied. Hence, the analysis of the tested data can be described herein.

The critical value of the table at 5% level of significance for 99 degrees of freedom = 1.96.

The t-test was applied to find whether there is a significant difference between sample investors with employed and unemployed spouses and the average expected Rate of Return on their investment scores. The calculated t-test value is

2.10, which is more than the table value of 1.96 at 5% level of significance. Hence, the Hypothesis 6 is rejected and there is a significant difference among sample investors with employed and unemployed spouses and the expected Rate of Return on investments (Table 12).

Table 11: Employment Status Of The Spouse & The Expected Rate of Return On Investments

Spouse Employ./ERR	Less than 7%	8% to 10%	11% to 13%	14% to 17%	18% to 20%	More than 20%	TOTAL
Yes	12	9	2	0	0	0	23
No	38	27	6	2	0	4	77
TOTAL	**50**	**36**	**8**	**2**	**0**	**4**	**100**

Figure 7: Employment Status Of The Spouse & The Expected Rate of Return On Investments

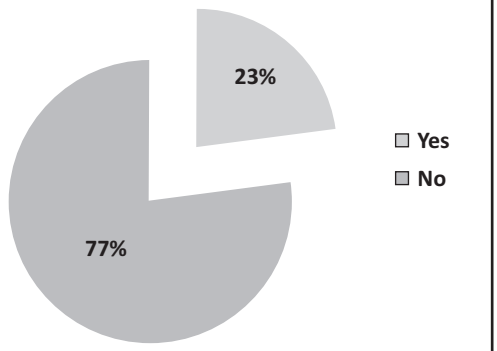


Table 12: 't'-test On Spouse Employment & Expected Rate of Return

Particulars	Yes	No
Mean	3.83	12.83
Variance	28.17	248.17
Observations	23.00	77.00
Pearson Correlation	0.99	
df	99.00	
t Stat	2.10	
t Critical two-tail	1.96	

MONTHLY INCOME & EXPECTED RATE OF RETURN ON INVESTMENTS

The main motive of everyone is to earn, and this intention does not disappear at any point of time. Generally, irrespective of the level of income, everyone aspires for more and more income. Receipt of a large income does not stop the recipient from earning again. The desire for high rate of interest increases. Hence, it was presumed that investors with all levels of income will aspire for high Rate of Return from their investments, and with this assumption, the analysis was made and the data is presented in the Table 13 and Figure 8.

From the Figure 8 and Table 13, it is observed that 60% of sample investors were having a monthly income of ₹ 10,001- ₹ 20,000, out of which, 62% of the sample investors expected less than 7% Rate of Return on their investments, 15% of sample investors were having a monthly income amounting to ₹ 20,001- ₹ 30,000, out of which, 47% of the sample investors expected less than 7% Rate of Return on their investments, 10% of sample investors had a monthly income amounting to ₹ 30,001- ₹ 40,000, out of which, 70% of sample investors expected 8% - 10% Rate of

Return on their investments. 9% of the sample investors had a monthly income amounting to ₹ 50,001- ₹60,000, out of which, 100% of the investors expected 8% - 10% Rate of Return on their investments.
So, critical value of the table at 5% level of significance for 99 degrees of freedom = 1.72.
Single factor ANOVA was applied to find whether there is any significant difference between the monthly income of the sample investors and the average expected Rate of Return on investments. The ANOVA results show that the calculated F-ratio value is 0.19, which is less than the table value 1.72 at 5% level of significance. Since the calculated value is less than the table value, it is inferred that there is no significant difference between the monthly income of the sample investors and the average expected Rate of Return on investments. Hence, the Hypothesis 7 is accepted (Table 14).

Table 13: Monthly Income & Expected Rate of Return On Investments

Monthly Income/ERR	Less than 7%	8% to 10%	11% to 13%	14% to 17%	18% to 20%	More than 20%	TOTAL
Up to ₹ 10,000	3	3	2	1	0	0	9
₹ 10,001- ₹ 20,000	37	17	3	1	0	2	60
₹ 20,001- ₹30,000	7	5	2	0	0	1	15
₹ 30,001- ₹ 40,000	2	7	1	0	0	0	10
₹ 40,001- ₹ 50,000	1	2	0	0	0	1	4
₹ 50,001- ₹ 60,000	0	2	0	0	0	0	2
TOTAL	**50**	**36**	**8**	**2**	**0**	**4**	**100**

Figure 8 : Monthly Income & Expected Rate of Return On Investments

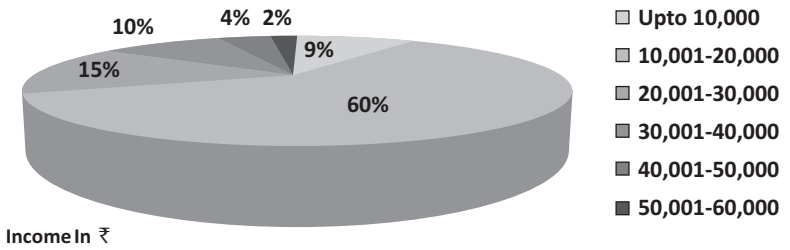


Table 14: ANOVA -Test On Monthly Income & Expected Rate of Return

Source of Variation	SS	df	MS	F	F crit
Between Groups	6.40	19.00	0.34	0.19	1.72
Within Groups	139.60	80.00	1.75		
Total	**146.00**	**99.00**			

MONTHLY EXPENDITURE & EXPECTED RATE OF RETURN ON INVESTMENTS

Expenses of a family are an important constraint in deciding the levels of saving. To increase the savings, investors have to increase their income and at the same time, they must reduce their expenses. Families with huge expenses may expect a higher Return on Investments in order to meet the increasing cost of living. The salaried class with a fixed source of income cannot manage the family with a single source of income in today's times. A reasonable Return On Investments may result in further savings. Hence, to know the impact of family expenses on the expected Rate of Return from investments, an analysis was made. The results are presented in the Table 15 and Figure 9.

From the Figure 9 and Table 15, it is ascertained that 42% of the sample investors were spending ₹ 5,001- ₹10,000 on expenditure, out of which, 52% of the sample investors were expecting less than 7% Returns On Investment, 33% of the sample investors were spending ₹ 10,001- ₹15,000 on expenditure, out of which, 70% of the sample investors were expecting less than 7% Rate of Return on their investments, 10% of the sample investors were spending ₹15,001- ₹ 20,000 and ₹ 20,001- ₹25,000 on expenditure, out of which, 65% of the sample investors expected 8% - 10% Rate of Return on their investments.

So, critical value of the table at 5% level of significance for 99 degrees of freedom = 1.72.

Single factor ANOVA was applied to find whether there is any significant difference between the monthly household expenses, and the average expected Rate of Return on investments. The ANOVA results shows that the calculated F-ratio value is 0.23, which is less than the table value 1.72 at 5% level of significance. Since the calculated value is less than the table value, it is inferred that there is no significant difference between the monthly expenses and the average expected Rate of Return investment scores. Hence, the Hypothesis 8 is accepted (Table 16).

MONTHLY INVESTMENT & EXPECTED RATE OF RETURN ON INVESTMENTS

Investment activity is a part of life of every income earner, hence, it should be done according to one's earning and saving potential. Money should not be invested differently, but it should be invested in different options, which divides the level of risk among such options, and in a nutshell, the investor gets an overall positive picture of the invested portfolio. Therefore, the above mentioned theory can be cross checked with the below mentioned numeric possibilities with special reference to the judicial department employees of Rajkot.

From the Figure 10 and Table 17, it is ascertained that 80% of the sample investors were investing less than 25% of their monthly income, out of which, 45% of the sample investors were expecting less than 7% Rate of Return on their investments. 19% of the sample investors were investing 26% - 50% of their monthly income, out of which, 58% of the sample investors expected 8% - 10% Rate of Return on their investments, 1% of the sample investors were investing 76%- 100% of their monthly income, out of which, 100% expected less than 7% Rate of Return on their investments.

So, the critical value of the table at 5% level of significance for 99 degrees of freedom = 1.66.

Single factor ANOVA was applied to find whether there is any significant difference between the monthly investments made by the sample investors and the average expected Rate Of Return on their investments. The ANOVA results show that the calculated value is 0.04, which is less than the table value of 1.66 at 5% level of significance. Since, the calculated value is less than the table value, it is inferred that there is no significant difference between the monthly investments made by the sample investors and the average expected Rate Of Return on their investment scores. Hence, the Hypothesis 9 is accepted (Table 18).

Table 15: Monthly Expenditure & Expected Rate of Return On Investments

Monthly Exp./ERR	Less than 7%	8% to 10%	11% to 13%	14% to 17%	18% to 20%	More than 20%	TOTAL
Up to ₹ 5,000	1	2	0	0	0	0	3
₹ 5,001- ₹ 10,000	22	13	4	2	0	1	42
₹ 10,001- ₹ 15,000	23	7	1	0	0	2	33
₹15,001- ₹ 20,000	1	7	2	0	0	0	10
₹ 20,001-₹ 25,000	2	6	1	0	0	1	10
₹ 25,001- ₹ 30,000	1	1	0	0	0	0	2
TOTAL	**50**	**36**	**8**	**2**	**0**	**4**	**100**

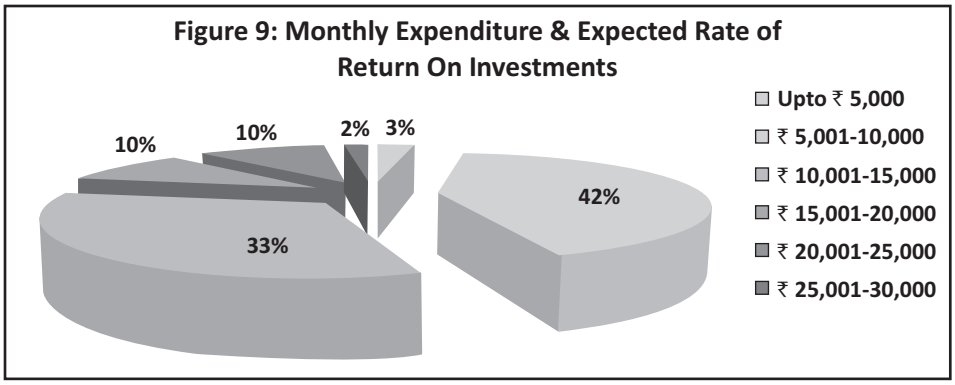


Table 16: ANOVA-test On Monthly Expenditure & Expected Rate of Return					
Source of Variation	**SS**	**df**	**MS**	**F**	**F crit**
Between Groups	4.80	19.00	0.25	0.23	1.72
Within Groups	87.20	80.00	1.09		
Total	**92.00**	**99.00**			

Table 17: Monthly Investments & Expected Rate of Return On Investments							
M. Inv./ERR	**Less than 7%**	**8% to 10%**	**11% to 13%**	**14% to 17%**	**18% to 20%**	**More than 20%**	**TOTAL**
Less than 25%	45	25	6	2	0	2	80
26% to 50%	4	11	2	0	0	2	19
51% to 75%	0	0	0	0	0	0	0
76% to 100%	1	0	0	0	0	0	1
TOTAL	**50**	**36**	**8**	**2**	**0**	**4**	**100**

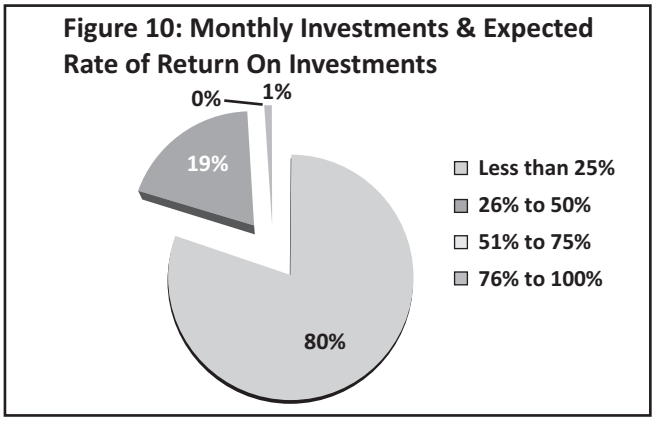


Table 18: ANOVA-test On Monthly Investments & Expected Rate of Return					
Source of Variation	**SS**	**df**	**MS**	**F**	**F crit**
Between Groups	2.50	24.00	0.10	0.04	1.66
Within Groups	191.50	75.00	2.55		
Total	**194.00**	**99.00**			

CONCLUSION

In the present study, the researchers attempted to study the profile and the expected Rate of Return on the investments of the Judicial Department Employees of Rajkot, Gujarat considering various factors.

NOTES

The data for all the Figures and Tables used in the study was derived from the Primary Data collected by the researchers.

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