Evaluation of the Financial Investment Kist Outcome of Iran Joint Stock Insurance Company in the Years 2006-2012

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ABSTRACT

In this research, the financial investment Kist outcome of Iran joint stock insurance company in the years 2006-2012 is evaluated. The performed evaluation was done by categorization of the investments, calculation of their output and the comparison of these outputs with indexes such as output indicator of stock market and inflation rate, and also the comparison of the output of each group of investments with each other. The earned result by applying the average methods and t-tests suggest the equality of portfolio output rate of Iran joint stock insurance company and the output indicator of stock market, the equality of bank saving interest rate and inflation rate, also the equality of financial investment Kist outcome and inflation rate. Foreign banks investments output being different or smaller in comparison with domestic investments output is another finding of this research.

KEYWORDS: Investment output, inflation, output indicator of stock market, Iran joint stock insurance company

1. INTRODUCTION

One of the most important topics discussed in any country economy is management and direction of capital accumulation and development of that country economy by assistance of such capitals. Investment institutes also consider the money depreciation in the time interval of capital return (inflation) as one of the investment expenses in order to calculate the investment output accurately [1]. Insurance companies, due to their nature of duties, are one of the most important bases of savings and as a result, are of major financial institutions in the capital market. It is clear that, the output rate of investments should not be less than inflation rate in the inflationary economy. In this research, the financial investment Kist outcome of Iran joint stock insurance company, as the first and the biggest Iranian insurance company including the shares of the stock exchange companies and other companies, domestic and foreign investments, domestic and foreign bank savings, credits provided to the insured, representatives and staffs and securities, was investigated and their output is analyzed yearly per case in comparison with inflation rate, market index output and with each other.

Research questions:

Does the exchange portfolio output rate of Iran joint stock insurance company differ from the rate of stock market indicator’s output between 2006 and 2012?

Was the mean rate of Iran joint stock insurance company’s bank guarantee interest between 2006-2012 more than inflation rate?

Was the rate of financial interest output in Iran joint stock insurance company between 2006 and 2012 higher than the inflation rate?

Does the rate of foreign banks’ investment output differ from the rate of internal investment output of Iran joint stock insurance company between 2006 and 2012?

Investment includes converting the cash into one or more kinds of possession that will be kept for some time in the future [2]. Hosseinnia (1996) [3] conducted a research with the title of “considering the importance of trading insurance companies’ investment and the situation of insurance industry investment in Iran in terms of finance between 1989 and 1993.” According to this research the portfolio output of the insurance industry exchange was not efficient in the mentioned years but it was efficient in terms of risk reduction in comparison with the market. Nemati Allahi Ardestani, (2003) [4] in designing the mathematical model of investment in company’s insurance industry and presenting a study case in Iran joint stock insurance companies, tried to design public desired programming models for a good investment in different kinds of Iran insurance industry companies and testing the model with actual data from Iran joint stock insurance company. Dehnadi (2004) [5] in the model of “financial-economic investments evaluation of insurance industry across 7 years, 1995-2001”, by considering the kinds investments in

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insurance industry concluded that the most investments in insurance industry belonged to bank savings and the highest output went to the exchange investment section and except the years 2000 and 2001 all the investments had lower output than the inflation rate. Soleimani Armide (2005) [6] in check efficiency of Asia joint stock insurance company in 2005 attempted to consider the mentioned company’s portfolio in the years 1994-2000 in terms of output, risk and comparing it with the outlay market. The studies have revealed that the investment of the company under the research was efficient in terms of output but in terms of risk deduction was not efficient enough. Haq Verdilou (2005) [7] in “evaluating the portfolio performance of exchange stock of Iranian insurance companies in the years1999-2003” studied the portfolio performance of exchange stock of Iranian insurance companies and concluded that the exchange portfolio output of insurance companies was more than the market portfolio output and it also had higher risk by that considering a high outcome is a natural case. Shabani (2007) [8] in “evaluating the financial and cash investment of Iran’s central insurance of retirement bank of deposit” concluded that in average between 2003 and 2006 the portfolio of the mentioned bank of deposit has had no higher output than the market and they were equal. In terms of risk reduction, the investments were not in the pleasant level either. However in total, in comparison with the forced risk, it had a better output comparing to the market. Matinfar (2003) [9] in exchange stock portfolio efficiency of Alborz joint stock insurance company in the years 1995-1999, following the study of investments’ performance in Alborz joint stock insurance company, concluded that the mentioned investments had no suitable risk and performance comparing to the market’s output.

2. RESEARCH METHODOLOGY

Present study involves the research population, the financial investments Kist of Iran joint stock insurance company in the years 2006-2012 including foreign and internal long-term and short-term saving account, bond and dative convenience to clerks, presenters and representative branches. In this research all the financial investments of Iran joint stock insurance company in 2006-2012 has been studied and research population was equal to the sample mass and sampling in this research is cancelled. Although the only choice in this regard is the statistical age limit that the final accounted 6 years is focused. Generally the research date can be divided into two major parts:

1. The data related to the focused company
2. The data related to the other countries

Accounting, to a great extend can normally underlie the fluency and validity of measurement tools and in minor differences caused by the script consideration method, solving and registering the real numbers took place [10].

2.1. Research design and data analysis

In the present study, for presenting the statistic and the investments, the mean tables, the (monthly) leveled mean method was used. Also for comparing and testing in order to show the meaningful difference or similarity between the variables, after collecting and controlling data, by using SPSS 15 software, the relevant information bank was established and then the data was processed and with the help of statistical techniques t-test was used for each question with two independent variables.

When the variance of the two groups is equal:

\[
S^2_d = \frac{SS_{x_1} + SS_{x_2}}{n_1 + n_2 - 2} \left( \frac{1}{n_1} + \frac{1}{n_2} \right)
\]

In this case the degree of freedom is:

\[
d.f = n_1 + n_2 - 2
\]

When the variance of the two groups is not equal:

\[
S^2_d = \frac{SS_{x_1}}{n_1(n_1 - 1)} + \frac{SS_{x_2}}{n_2(n_2 - 1)}
\]

In this case the degree of freedom is:

\[
d.f = \frac{\left( \frac{s^2_1}{n_1} + \frac{s^2_2}{n_2} \right)^2}{\frac{s^2_1}{n_1 - 1} + \frac{s^2_2}{n_2 - 1}}
\]
Note: In performing this test it must be noted that the data is not distributed normally, so we must use non-parametric equitation [11].

2.1.1. U Mann-Whitney test
Mann-Whitney test is shown with W. the formula is as follow:

\[
W = n_1n_2 + \frac{n_1(n_1 + 1)}{2} - R_1
\]

\[
W' = n_1n_2 + \frac{n_2(n_2 + 1)}{2} - R_2 \quad \text{or} \quad W + W' = n_1n_2
\]

In order to answer the research question, the data are described and analyzed through independent group t-test and SPSS software is used for calculation. However, before performing all tests, the hypothesis of grade distribution normality in each group was considered by using one sample Smirnoph-Calmogroph test that the result showed the grade distribution was normal and using parametric t-test of independent groups is possible for all tests [12].

2.2. Research question 1:
Indicator output of stock market M = the exchange stock outcome of insurance company M: H_0
Indicator output of stock market M ≠ the exchange stock outcome of insurance company H_1

Table 1. t-test result of independent groups for comparing the exchange output rate of Iran joint stock insurance company with the rate of stock market output in 2006-2012

<table>
<thead>
<tr>
<th>Meaningfulness level</th>
<th>Degree of Freedom</th>
<th>t</th>
<th>Variance Equality</th>
<th>SD</th>
<th>Mean</th>
<th>level</th>
<th>Independent variable</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.359</td>
<td>12</td>
<td>0.954</td>
<td>0.5640</td>
<td>0.348</td>
<td>0.164</td>
<td>Iran insurance company</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>equal</td>
<td></td>
<td></td>
<td></td>
<td>group</td>
</tr>
<tr>
<td>0.491</td>
<td>3.81</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Stock market</td>
<td></td>
</tr>
</tbody>
</table>

As it is clear in table 1, there is no significant difference between the portfolio output rate of Iran joint stock insurance company and indicator output of stock market in the years 2006-2012 (t_{12}=0.954 p>0.05). Therefore the null hypothesis is rejected. In other words, the exchange portfolio output of Iran joint stock insurance company was equal to the stock market. The test result in table 1 shows that these two rates are equal and no statistical significant differences was seen.

2.3. Research question 2:
Inflation rate M < bank saving interest rate M: H_0
Inflation rate M > bank saving interest rate insurance M: H_1

Table 2. t-test result of independent groups for comparing the mean score of bank saving interest rate of Iran joint stock insurance company with inflation rate 2006-2012

<table>
<thead>
<tr>
<th>Meaningfulness level</th>
<th>Degree of Freedom</th>
<th>T</th>
<th>Variance equality</th>
<th>SD</th>
<th>Mean</th>
<th>level</th>
<th>Independent variable</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.164</td>
<td>7.001</td>
<td>-1.554</td>
<td>Non-equal</td>
<td>0.003</td>
<td>0.008</td>
<td>0.123</td>
<td>Iran insurance company</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>0.003</td>
<td></td>
<td></td>
<td></td>
<td>group</td>
</tr>
<tr>
<td>0.029</td>
<td>0.141</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>0.141</td>
<td>Inflation rate</td>
</tr>
</tbody>
</table>

As it is seen in table 2, there is no significant difference between the mean score of bank saving interest rate of Iran joint stock insurance company and inflation rate (t_{12}=1.554 p>0.025). Therefore the null hypothesis is rejected. In other words, the mean score of bank saving of Iran joint stock insurance company an inflation rate was equal. The test result in table 2 shows that bank saving interest rate of Iran joint stock insurance company in the focused years was not more than inflation rate and they were equal.

2.4. Research question 3:
Inflation rate M < financial investments’ Kist outcome rate M: H_0
Inflation rate M > financial investments’ Kist outcome rate M: H_1
As it is seen in table 3, there is a significant difference between financial investment Kist output rate and inflation rate \((t_{12}=-2.211\ p>0.025)\). Therefore the null hypothesis is not rejected. In other words, the financial investment Kist output rate of Iran joint stock insurance company and inflation rate are equal. The test result in table 4 shows that there is no difference between the company’s financial investments’ Kist output rate and inflation rate, so they are equal.

2.5. Research question 4:
Internal investment output rate \(M=\)foreign bank investment output rate \(M:H_0\)
Internal investment output rate \(M\neq\) foreign bank investment output rate \(M:H_1\)

As it is seen in table 4, there is a significant difference between the internal investment output rate and the internal investment output rate of Iran joint stock insurance company \((t_{11}=4.616\ p<0.05)\). Therefore the null hypothesis is rejected. In other words, the rate of foreign banks’ investment output is different and lower than internal investment output rate of Iran joint stock insurance company and the test result shows that foreign banks’ investment output rate is different and lower than internal investment output rate.

### Table 3: t-test result of independent groups for comparing financial investments Kist outcome rate Iran joint stock insurance company with inflation rate 2006-2012

<table>
<thead>
<tr>
<th>Meaningfulness level</th>
<th>Degree of freedom</th>
<th>t</th>
<th>Variance equality</th>
<th>SD</th>
<th>Mean</th>
<th>Independent variable</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.047</td>
<td>12</td>
<td>-2.211</td>
<td>equal 0.05</td>
<td>0.016</td>
<td>0.113</td>
<td>The financial Kist outcome rate group</td>
</tr>
<tr>
<td></td>
<td></td>
<td>0.029</td>
<td>0.141</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

3. DISCUSSION AND RESULT

The result of first test shows the equality of exchange portfolio output rate and market indicator. This result matches Shababi’s research mismatches Haq Verdilon, Soleimani, Hosseinia and Matinfar.

The result of second research question shows that the saving interest rate is not more than inflation and it somehow implies the equality and lack of significant difference. This result mismatches Dehnadi and Hosseinia’s research. However the present study and researches above are similar in one case that the saving interest output rate is not higher than inflation. The equality of saving output rate and inflation rate in the focused years can illustrate that firstly the company managed to have the least benefit from its bank savings by improving the remove and settle time. Secondly, in one look it seems that the mixture of determined saving interest output by the central bank is related to each year’s inflation.

Question four—the result of present study shows that the investments’ Kist output rate was not more than the inflation rate, in other words it has no significant difference with inflation rate and they are equal. Dehnadi and Hosseinia’s research result mismatches the present study. However, the present study and the researches above are similar in the case that the company’s investments’ Kist output rate is not higher than inflation.

The result of question four shows that there is a significant difference between the foreign banks’ investment output rate and internal investments and demonstrates that the internal investments’ output rate is more. In order to clarify the reasons of low output of foreign banks they must be geographically divided into two parts. In this way it will be clear that the reason is investing in the banks of the countries around Persian Gulf whose saving interest rate as well as the exchange equality rate is low. While in European countries, due to the inflation restrain, the banks will pay low interest to their savings. In return, saving in these countries’ banks can cause exchange rate adjustment.
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