

Impact Of January Revolution On Financial Ratios Of Egyptian Life Insurance Market

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ABSTRACT

Egyptian insurance market consists of Life insurance companies and Non-Life insurance companies. The Egyptian Financial Supervisory Authority EFSA demand from each insurance company to prepare some financial ratios as a guide on its activities, they are about 14 ratio in average at Life insurance companies. Egyptian market has its difficult changes at the latest 3 years. This research will try to test its null hypothesis about if there is a significant difference at Egyptian life insurance financial ratios before and after January revolution? . SPSS package had used in statistical analysis and conducted to accept the null hypothesis.

Key words: Egyptian life insurance Market, Financial Ratios.

Introduction

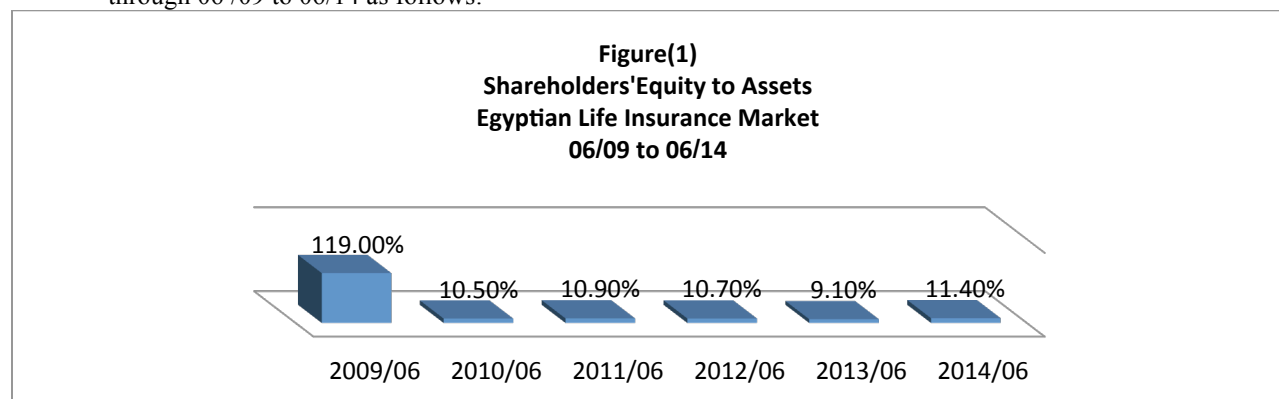
Egyptian insurance market includes two main classes of business; Life insurance business, that provides its insurance coverage for individuals, groups, and health , and Property and Liability business(Non-Life insurance), which provides its insurance coverage of Fire , Marine Cargo, Inland Transport, Marine Hull, Aviation, Motor Comprehensive, Motor Act, Engineering, Oil, Accident, and Health.

Egyptian society over the revolution in January 2011, which may be affected the entire sectors of society. Insurance sector as apart from the Egyptian society may also be affected by that revolution. This research aims to answer the question; *has Egyptian life insurance financial ratios differ before and after January revolution?*

Analytical Analysis

There are some financial ratios that determined to calculate in life insurance business, each ratio represents a relation between the items that included in financial statements which held by the insurance companies. Depending on the data available in researches management at the Egyptian financial supervisory authority (EFSA), and deepening on the data published in the insurance market annual report, and by considered that the years 06/09, 06/10 and 06/11 represents years before January revolution, and years of 06/12, 06/13 and 06/14 are represents years after January revolution, some financial ratios will be figured in its trend within the period of 2008/2009 to 2013/2014 as follows;

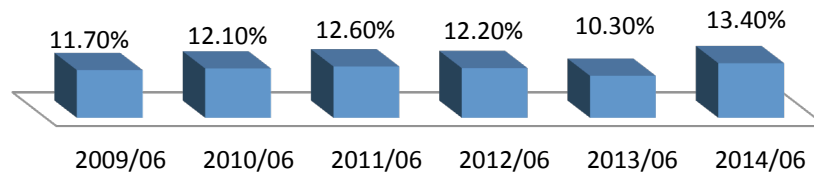
- 1- **Shareholders' Equity to Total Assets.** The next figure (1) illustrates that ratio in life insurance market through 06/09 to 06/14 as follows:



The last figure (1) showed that there is no signal difference in this ratio before revolution at years 06/09 , 06/10, 06/11 and after it at years 06/12, 06/13, 06/14.

- 2- **Shareholders' Equity to Technical Reserves.** The next figure (2) illustrates that ratio in life insurance market through 06/09 to 06/14 as follows:

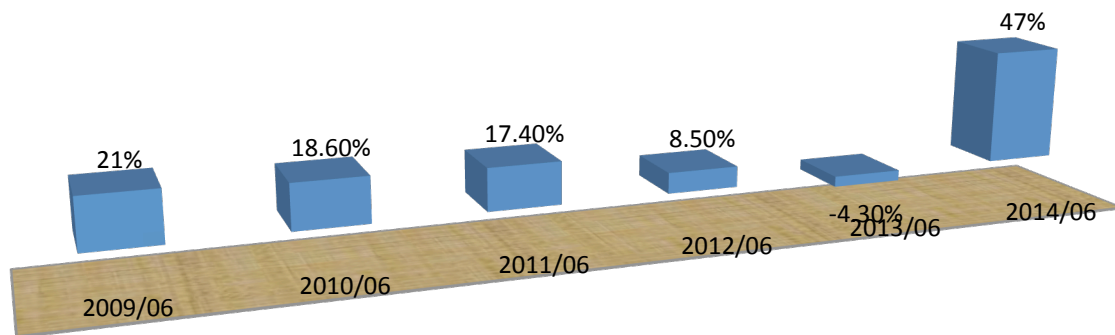
Figure(2)
Shareholders'Equity to Technical Researves
Egyptian life Insurance Market
06/09 to 06 /14



The last figure (2) had concluded that, there is no signal difference in this ratio before revolution at years 06/09, 06/10, 06/11 and after it at years 06/12, 06/13, 06/14.

3- Changes in Shareholders' Equity. The next figure (3) illustrates that ratio in life insurance market through 06/09 to 06/14 as follows:

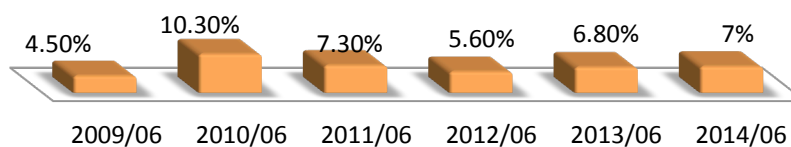
Figure(3)
Changes in Shareholders'Equity
Egyptian Life Insurance Market
06/09 to 06/14



The last figure (3) showed that, there is a difference in this ratio before revolution at years 06/09, 06/10, 06/11 and after it at years 06/12, 06/13, 06/14.

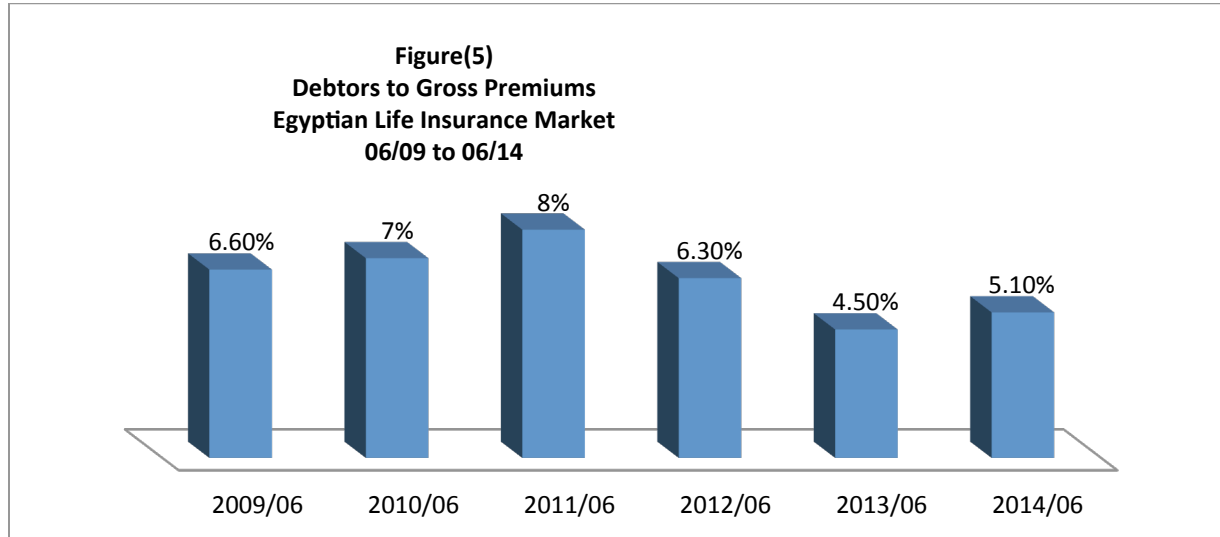
4- Illiquid Assets to Total Assets. The next figure(4) illustrates that ratio in life insurance market through 06/09 to 06/14 as follows:

Figure(4)
Illiquid Assets to Total Assets
Egyptian Life Insurance market
06/09 to 06/4



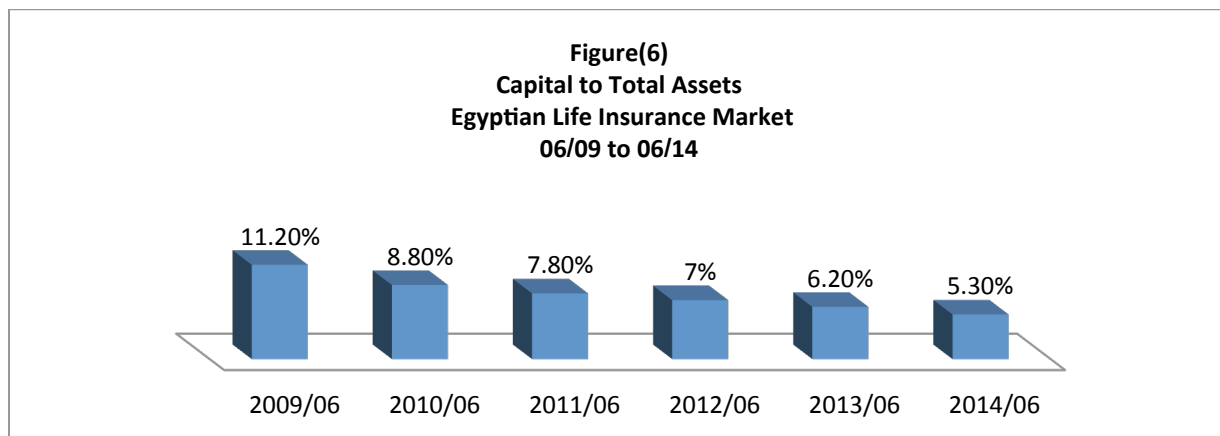
The last figure (4) showed that, there is a difference in this ratio before revolution at years 06/09, 06/10, 06/11 and after it at years 06/12, 06/13, 06/14.

5- Debtors to Gross Premiums. The next figure(5) illustrates that ratio in life insurance market through 06/09 to 06/14 as follows:



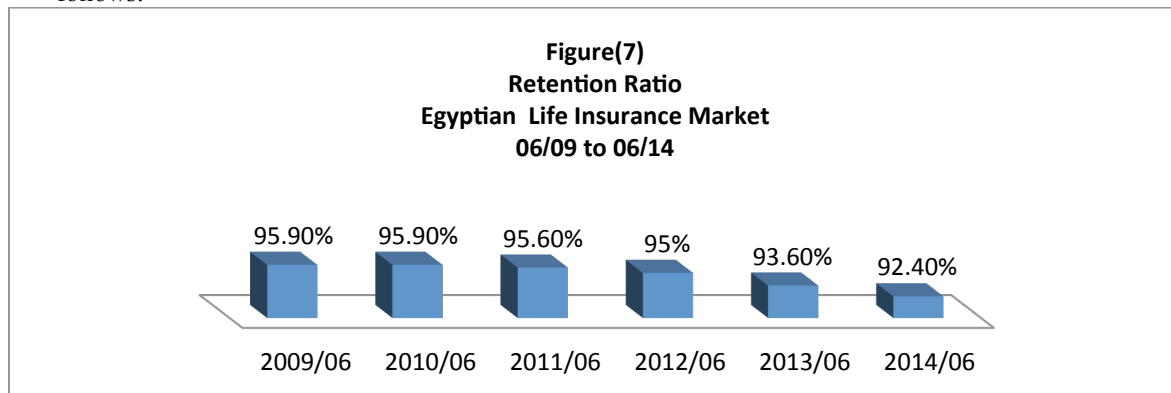
The last figure (5) showed that, there is a difference in this ratio before revolution at years 06/09, 06/10, 06/11 and after it at years 06/12, 06/13, 06/14.

6- Capital to Total Assets. The next figure(6) illustrates that ratio in life insurance market through 06/09 to 06/14 as follows:



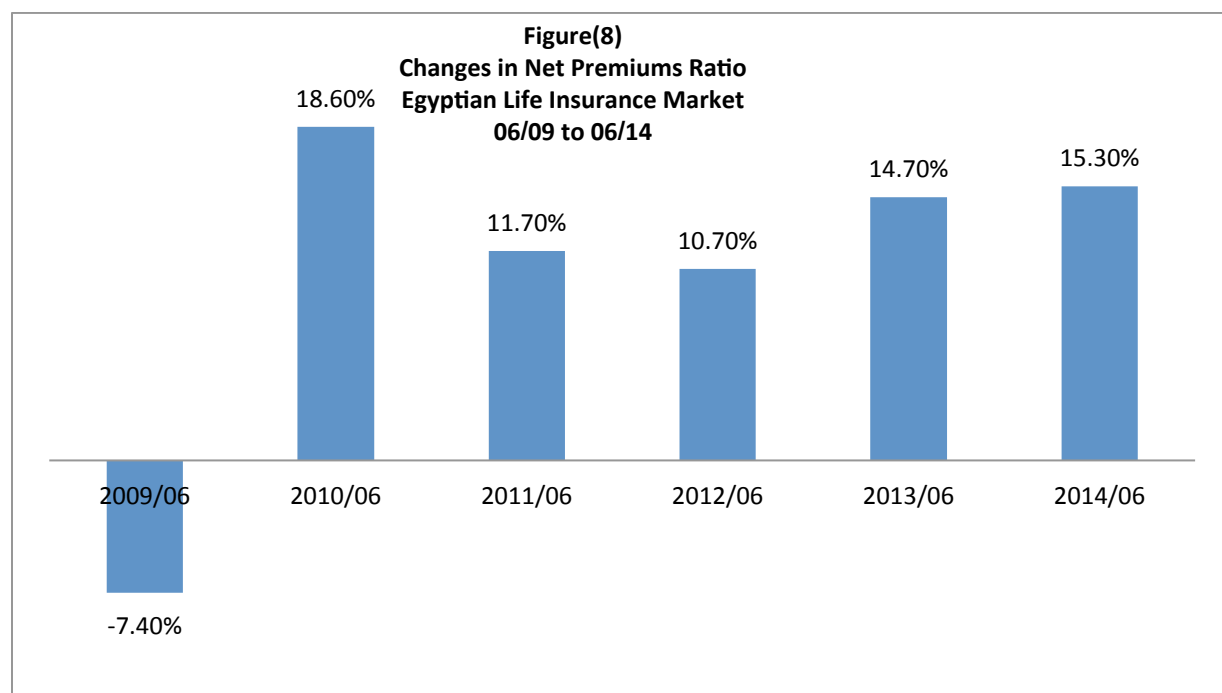
The last figure (6) showed that, there is a decreasing at this ratio from a year to another.

7- Retention Ratio. The next figure(7) illustrates that ratio in life insurance market through 06/ 09 to 06/ 14 as follows:



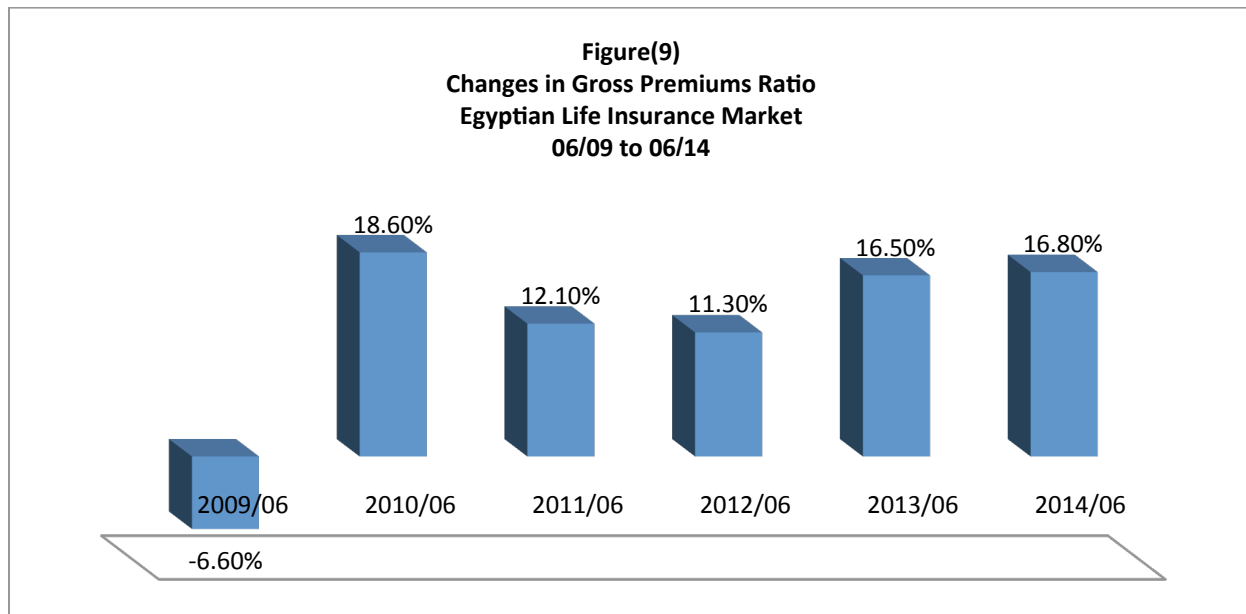
The last figure (7) showed that, there is a decreasing at this ratio from a year to another.

8- Changes in Net Premiums. The next figure(8) illustrates that ratio in life insurance market through 06/ 09 to 06/14 as follows:



The last figure (8) showed that, there is a fluctuation in that ratio from -7.4% in 2008-2009 to 1645.5% in 2013-2014.

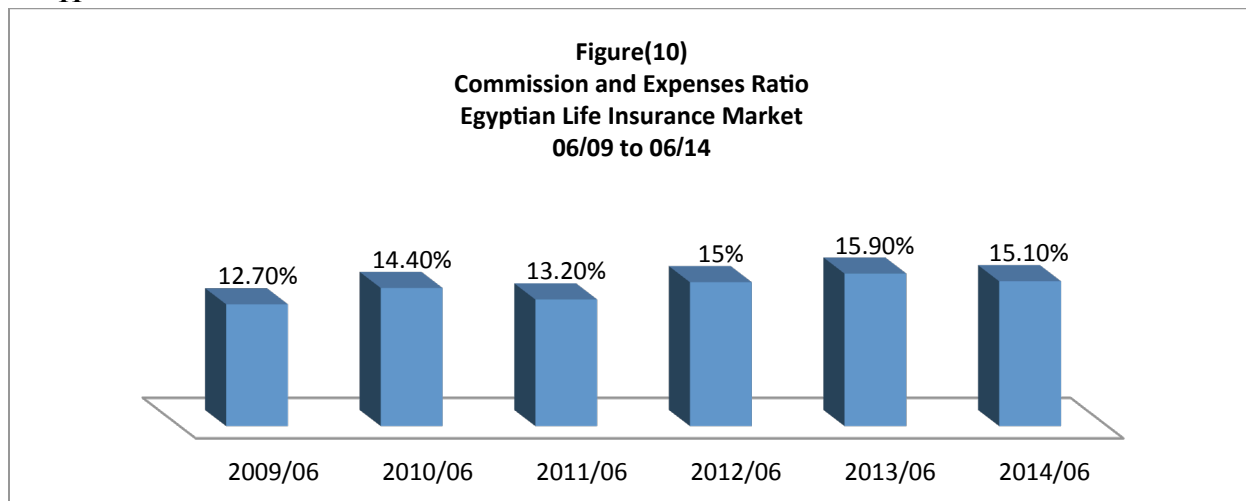
- 9- **Changes in Gross Premiums.** The next figure(9) illustrates that ratio in life insurance market through 06/ 09 to 06/14 as follows:



The last figure (9) showed that, there is a fluctuation in that ratio from -6.6% in 2008-2009 to 159.5% in 2013-2014

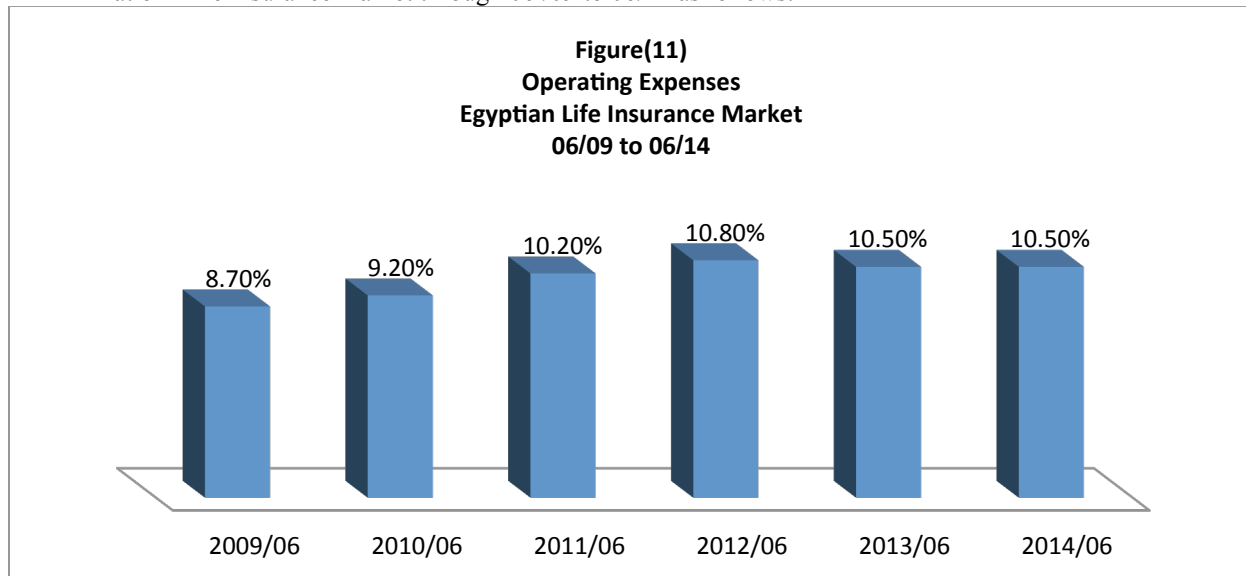
- 10- **Commission and Expenses Ratio.** The next figure (10) illustrates that ratio in life insurance market through 06 /09 to 06/14 as follows:

11-



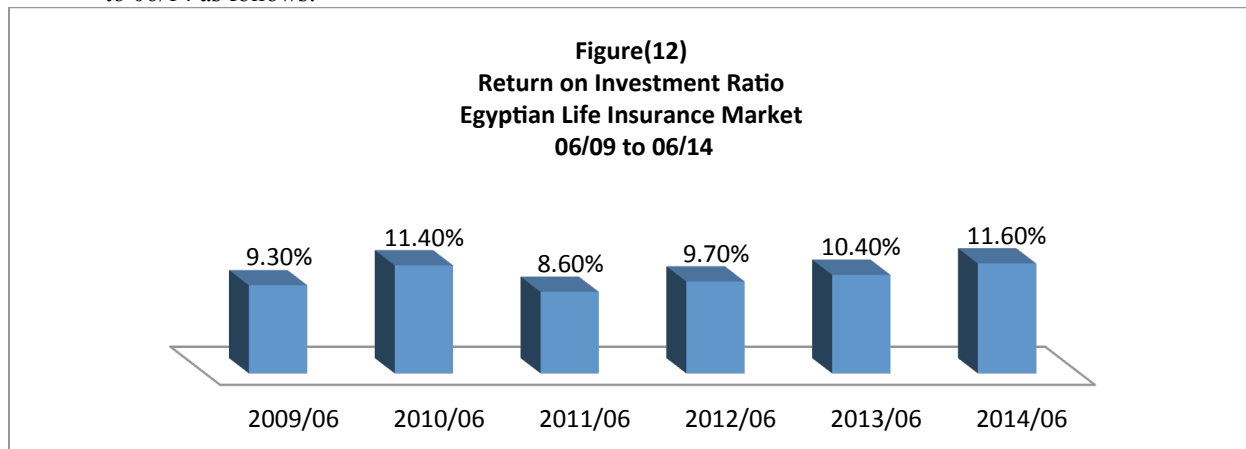
The last figure (10) showed that, there is an increasing at this ratio from a year to another.

12- Operating Ratio. it measures management expenses to gross premiums. The next figure(11) illustrates that ratio in life insurance market through 06 /09 to 06/14 as follows:



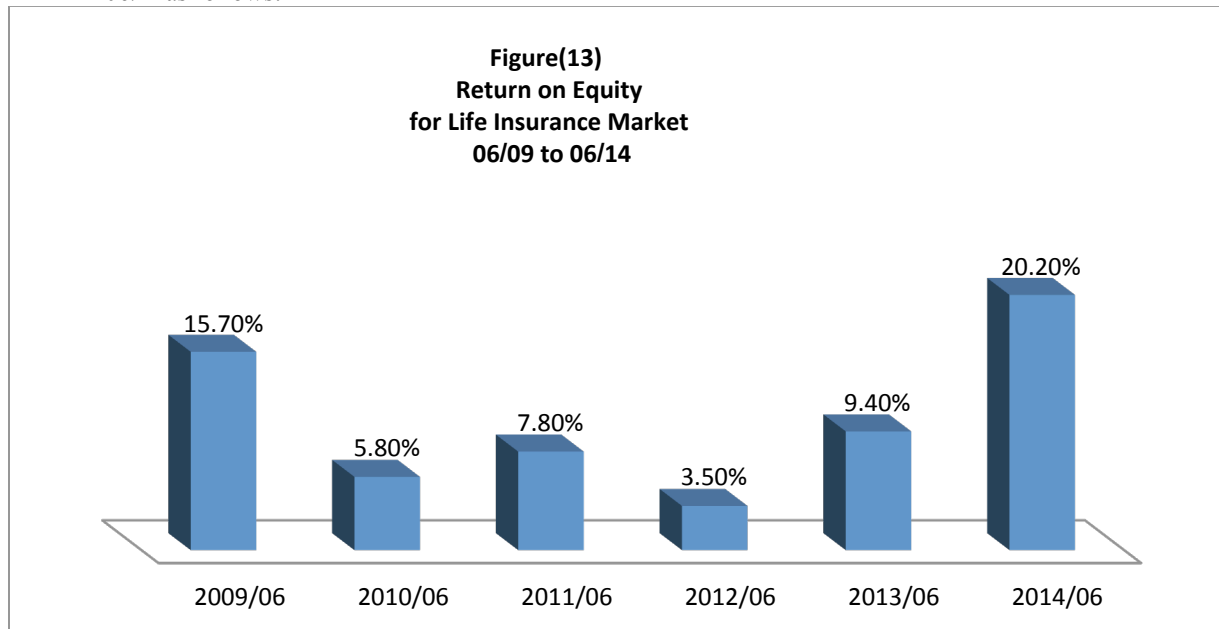
The last figure (11) showed that, there is a fluctuation at this ratio from a year to another.

13- Return on Investment Ratio. The next figure(12) illustrates that ratio in life insurance market through 06/ 09 to 06/14 as follows:



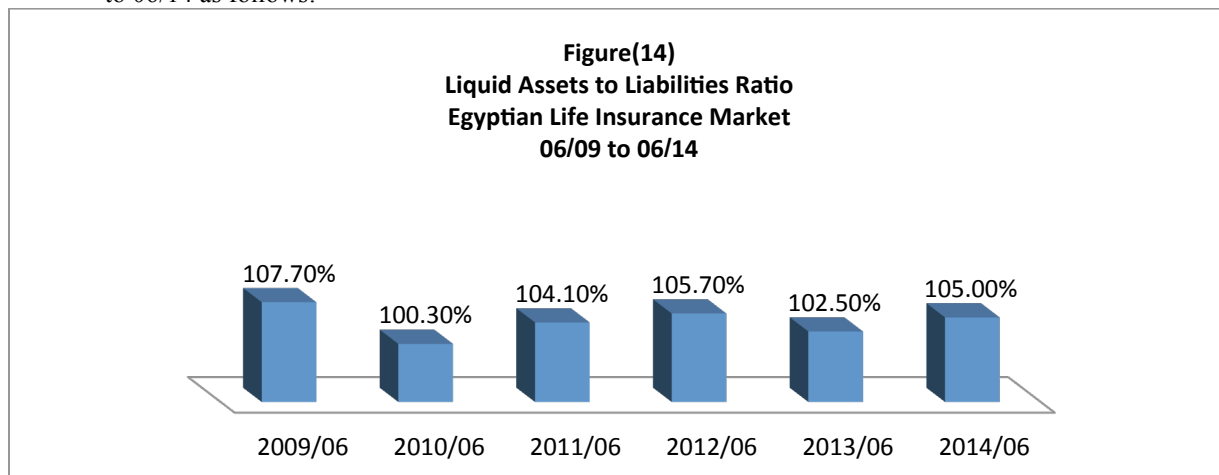
The last figure (12) showed that, there is a fluctuation at this ratio from a year to another.

14- Return on Equity Ratio. The next figure(13) illustrates that ratio in life insurance market through 06/ 09 to 06/14as follows:



The last figure (13) showed that, there is a fluctuation at this ratio from a year to another.

15- Liquid Assets to Liabilities. The next figure(14) illustrates that ratio in life insurance market through 06/ 09 to 06/14 as follows:



The last figure (14) showed that, there is a fluctuation at this ratio.

So, the analytical study showed that, some financial ratios have fluctuations, and it will be important to study if these fluctuations or differs in the financial ratios represent a significant differ or not, what males the statistical analysis is needed.

Statistical Analysis

To test if January Revolution affects on financial ratios of Egyptian life insurance market, Paired- Samples T Test will be use. Before doing T-Test, Kolmogorov-Smirnov Test and Shapiro Wilk Test has to be done for normality condition to Parametric Tests. Using published data on Annual Statistical Report of Egyptian Insurance Market, years 2008\2009 to 2013\2014, for Egyptian life insurance market, 2011\2012, 2012\2013, and 2013\2014). IBM Statistical Package for Social Sciences (SPSS) version (20) will be used.

To determine which kind of tests will be used, parametric or non-parametric tests, T-Test for normality has to be applied. The next table (1) shows results of normality test that are conducted:

Table(1)
Tests of Normality

	Kolmogorov-Smirnov ^a			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
C1	.262	6	.200*	.852	6	.165
C2	.201	6	.200*	.953	6	.763
C3	.266	6	.200*	.929	6	.572
A1	.256	6	.200*	.930	6	.579
A2	.175	6	.200*	.957	6	.795
A3	.151	6	.200*	.961	6	.825
R1	.240	6	.200*	.847	6	.147
P3	.338	6	.031	.780	6	.039
P4	.327	6	.044	.762	6	.026
E2	.194	6	.200*	.941	6	.667
E4	.269	6	.200*	.865	6	.206
E5	.184	6	.200*	.944	6	.690
E6	.229	6	.200*	.930	6	.577
L1	.149	6	.200*	.989	6	.988

a. Lilliefors Significance Correction

*. This is a lower bound of the true significance.

Where, C1: Shareholders 'Equity to Total Assets, C2: Shareholders 'Equity to Technical Reserves, C3: Changes in Shareholders' Equity, A1: Illegal Assets to Total Assets, A2: Debtors to Gross Premiums, A3: Capital to Total Assets, R1: Retention Ratio, P3: Changes in Net Premiums, Changes in Gross Premiums, Commission and Expenses Ratio, Operating Ratio, Investment Ratio, Return on Equity, Liquid Assets to Liabilities.

From last table (1), P.Value of kolmogorov-Smirnov and Shapiro-Wilk Test for all variables Except P3 and P4 > 5%, which means Normality condition, is not available, which means the Non Parametric Test has to be used.

Next table (2) will summarize the statistical Wilcoxon Test results:

Table(2)

Wilcoxon Test Results

Ratio	Sig.(2-tailed)	Z	Mean Rank	
			Negative	Positive
Shareholders 'Equity to Total Assets	0.285	-1.069	2.50	1.00
Shareholders 'Equity to Technical Reserves	1.000	0.000	3.00	1.50
Changes in Shareholders' Equity	1.000	0.000	1.50	3.00

Assets to Total Assets	0.593	-0.535	2.00	2.00
Debtors to Gross Premiums	0.109	-1.604	2.00	0.00
Capital to Total Assets	0.109	-1.604	2.00	0.00
Retention Ratio	0.109	-1.604	2.00	0.00
Changes in Net Premiums	0.593	-0.535	2.00	2.00
Changes in Gross Premiums	0.285	-1.069	1.00	2.50
Commission and Expenses Ratio	0.109	-1.604	0.00	2.00
Operating Ratio	0.109	-1.604	0.00	2.00
Investment Ratio	0.593	-0.535	2.00	2.00
Return on Equity	0.593	-0.535	2.00	2.00
Liquid Assets to Liabilities.	0.593	-0.535	2.00	2.00

✚ The last table (2) showed that sig. (p.value) > 5%, what means accept the null hypothesis by there is no significant difference of average Egyptian financial life insurance ratios before and after January revolution, so Null hypothesis of this research is accepted

Recommendation

It will be useful for the research purpose to get an accurate results, to make it possible published get a financial data of Egyptian insurance market, for quarter periods plus the annual one.

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