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Factors Affecting the Profitability of Commercial Banks in Egypt over the Last 5 year (2011-2015)

[1]May Wahdan and [2]Walid El Leithy
[1]Maastricht School of Management, Maastricht, Netherlands
[2]School of Business, Canadian International College, Fifth Avenue, New Cairo, Cairo, Egypt

Abstract: The banking sector in Egypt as well as worldwide is considered to be the backbone of trade and business; it is considered to be the main source of finance for most of the economic activities. However, the determinants of banks financial performance are not indicated in a specified model. Therefore, to ensure a better financial performance for the sector, determinants of banks profitability in Egypt should be studied and specified in a clear model to further enhance performance and add value to the Egyptian economy. Accordingly, this study aims to specify the key internal and external factors that have the highest effect on the financial performance of commercial banks in Egypt during the period from 2011 till 2015. A panel data set that covers a 5 year period from 2011-2015 with a sample of 5 top banks of Egypt represents the sample of this study. The data were taken from the central bank of the Egypt, as well as the published financial statements of the chosen banks. The research main findings indicate that 77% of the variation in ROA is explained by the capital adequacy, inflation rate and total non-interest income while 61% of the variation in roe is explained by the capital adequacy, loan loss provisions, net interest income, total non-interest income and inflation Rate.

Key words: Inflation rate, net interest income, capital adequacy, loan, loss provisions

INTRODUCTION

The Egyptian banking industry is amongst the oldest and largest in the region. It plays an important role in the economic and social development. The Egyptian banking sector is diversified and include commercial banks (local and foreign banks) as well as specialized banks operating in the fields of investment, agriculture, exporting, housing and development. Enhancing the performance of this sector will definitely lead to better economic performance. To reach efficient banking environment, prudential controls and a non-distorted macroeconomic framework are required. In the past few years, the Egyptian banking sector has gone through major reforms that aimed to improve the assets quality and capital adequacy of the sector according to Central Bank of Egypt Phase I banking supervision reform publications. The sector has a promising growth potential, however, the determinants of banks profitability are not indicated in a specified model thus, to ensure a better performance for the sector, determinants of banks profitability should be studied and specified in a clear model to further enhance performance and add value to economy.

Meanwhile, both ROE and ROA are main banking profitability indicators; these two indicators are used in this study to represent the profitability index, hence measure the effect of the internal and external variables on these two ratios to indicate whether they do or do not have an effect on banks profitability. The ROE is the ratio of net income after taxes divided by total equity capital. It represents the rate of return earned on the funds invested in the bank by its stockholders. ROE reflects how effectively a bank management is using shareholders' funds. Thus, it can be deduced from the above statement that the better the ROE the more effective the management in utilizing the shareholders capital. While ROA measures the ability of the bank management to generate income by utilizing company assets at their disposal, it shows how efficiently the resources of the company are used to generate the income and it further indicates the efficiency of the management of a company in generating net income from all the resources of the institution (Khrawish, 2011).

To this end, factors affecting banking sector profitability in Egypt are categorized into two main Factors; internal and external, whereas internal factors are those affected by bank management decision and the methodology of running the business, while external include industry and macroeconomic related factors and legal environment where these banks operate in, in this study both of the two classification are included.

Corresponding Author: May Wahdan, Maastricht School of Management, Maastricht, Netherlands

Internal factors: Those are the bank specific variables that influence the profitability of the bank, factors that are within the scope of the bank and they differ from bank to another (Ongore and Kusa, 2013) they include the following.

Capital adequacy: Capital Adequacy Ratio (CAR) is the ratio of a bank's capital in relation to its risk weighted assets and current liabilities; it is measured by the means of Equity capital/risk weighted assets. Efficient CAR help protect depositors and promote the stability and efficiency of banking systems around the world, according to Investopedia "Risk Weighted Assets" (RWA) consists of two types of capital tier one capital, which can absorb losses without a bank being required to cease trading and tier two capital, which can absorb losses in the event of a winding-up and so provides a lesser degree of protection to depositors" thus CAR determine the financial institution capacity to meet their liabilities and other risks such, i.e., credit risk, operational risk, etc., the bank's capital is like a "cushion" for any potential losses, to protects the bank's depositors and other lenders. Central Bank in Egypt as well as other countries define and monitor CAR to maintain confidence in the banking system. The findings of Goddard *et al.* (2004), Athanasoglou *et al.* (2008), Iannotta *et al.* (2007), Pasiouras and Kosmidou (2007), Athanasoglou *et al.* (2008) and Garcia *et al.* (2009) supports that Capital adequacy has a positive impact on bank performance and profitability. Tariq *et al.* (2014) studied the determinants of the banks performance on commercial banks in Pakistan in the period from 2004-2010, results indicated that the capital strength of a bank is utmost significance in affecting its performance, as a well- capitalized bank is observed to be less risky and leading to higher profitability. To examine impact of bank capital on profitability and risk, (Lee and Hsieh, 2013) analyzed the data of 2,276 banks in 42 countries in Asia during 1994-08, they found that there was a significant direct relation between the bank capital and profitability. Tariq *et al.* (2014) studied the influence of determinants on the performance of commercial banks in Pakistan during the period from 2004-2010. Result indicates the capital strength of a bank is utmost significance in affecting its performance.

- H_1: There is a positive linear relationship between capital adequacy and the profitability represented in the ROE and ROA of commercial banks in Egypt

Loan Loss Provision: Measured by the ratio (Loan loss provision to total loans) Loan provision expense is an expense set aside as an allowance for non-performing loans, for each category of non-performing loans a ratio of the loan amount is set aside to recover in case of client stopped payments. This implies that the increase in the nonperforming loans lead to increase in the loan loss provision expense affecting negatively the bank profitability. The study of Frederick results implied that the increase in non-performing loans led to the increase in loan loss provisions, which affect the profits negatively. Staikouras and Wood (2011) used descriptive statistics; multiple regression and matrix of correlation coefficients to find that in European banks loan loss provisions to total loans had negative impact on bank profitability. Macit (2012) examined factors affecting banks profitability in Turkey using ROE and the ROA. The findings stated that the ratio of non-performing loans to total loans has a significant negative effect on profitability. This is harmonious with the study by Davydenko in the Ukrainian banking sector. Macit (2012) examined the macroeconomic and bank specific determinants of profitability in the participating banks in Turkey using ROE and the ROA. The findings continue to state that for the bank specific determinants of profitability, the ratio of non-performing loans to total loans carries a significant adverse effect on profitability. According to World Bank the banking sector non-performing loans to total gross loans (%) in Egypt was last measured at 9.30% in 2014, down from 13.6% in 2000, this percentage fall down due to banking reform scheme adopted by the CBE and government. The Egyptian authorities represented in the Central Bank undertook major banking reforms towards a more liberal system and strengthening banks regulations and supervision according to internationally accepted and to ensure the stability of the banking industry, the regulatory policy should include strong enforcement mechanism of prudential bank regulation as well as elements of private market discipline. The reform plan was focused in the first place on bad loans problem. According to CBE, "The banking reform unit was established in 2004 with the purpose of restructuring the banking sector. A restructuring plan was developed with the objective of strengthening the banking sector and increasing its robustness to enable it to face global and regional competition effectively and help achieve the targeted economic growth. The plan started in 2004 and ended in 2008 it entailed four main pillars: Privatization and consolidation within the banking sector, Addressing the issue of Non-Performing Loans (NPLs), Financial and managerial restructuring of state owned banks, Upgrading CBE banking supervision:

- H_2: There is a negative linear relationship between loan loss provisions and the profitability represented in the ROE and ROA of commercial banks in Egypt

Bank size is also one of the main factors that guide bank performance represented in the growth in total assets figure, The impact of growing banks size on profitability can be positive up to a certain limit, beyond which becomes negative on profitability. Signaling theory put an explanation for the association between capital structure and profitability. Nonetheless, bank size can lead to a positive effect on profitability, if there are significant economies of scale as confirmed by Bikker and Hu (2002) and Goddard *et al*. (2004) who found a positive and significant relationship between bank size and profitability. Bank size indicates direct association with profitability as large banks earn more profit compared to smaller banks and the assets quality affects the performance of the banks positively quoted Tariq *et al*. (2014) study. As Trujillo-Ponce indicated. The signaling hypothesis suggests a positive relationship between capital and profitability. Furthermore, after a certain limit of capital increase a negative relationship between capital and profitability is predicted (Dietrich and Wanzenrid, 2011). Big banks have more bargaining capability, getting benefits from their solid capital base, have a wide branches network that enables them to acquired larger number and diversified customers, can share in large syndications, able to benefit from economies of scale and scope. Consequently, larger banks in terms of Assets, i.e., National Bank of Egypt expected to have more returns than smaller ones, i.e., BoA Egypt according to Jonsson:

- H_3: There is a positive linear relationship between Bank Size and the profitability represented in the ROA and ROE of commercial banks in Egypt

Cost efficiency; interest expenses to equity, the bank's efficiency ratio (cost to income ratio) measures the bank's ability to turn resources into revenue. The lower the ratio, the better "50% is generally regarded as the maximum optimal ratio" according to Investopedia, an increase in the efficiency ratio of banks indicates either its revenues is decreasing or costs are increasing. Cost efficiency is defined as a measure of how far a bank's cost is from the best practice bank's cost if they were to produce the same output under the same macroeconomic conditions, according to M. Kabir Hassan. According to N. Fredric, Cost efficiency is a factor that affects banks performance in Kenya. Dawood (2014) study examined the profitability of the 23 commercial banks operating in Pakistan from 2009-2012; the study used the Ordinary Least Square (OLS) method, the empirical findings stated that cost efficiency, liquidity and capital adequacy has a significant effect on bank's profitability.

- H_4: There is a positive linear relationship between Cost Efficiency and the profitability represented in the ROA of commercial banks in Egypt

Net Interest Income; is the difference between interest received from assets and interest paid on liabilities and it affects the bank performance in a direct way as it is considered to be the result of the core banking activities (Lending), measured in the terms of net interest income/average earning assets ratio, a bank net interest income equals interest income minus interest expenses and it has the highest effect on the net profit in the income statement, thus it is an important determinant of the bank's performance. Net interest income is defined as the cash flows received from loans and other investments minus interest payments on deposits and other forms of debt, both cash inflows and outflows directly depend on the interest rates taken on loans and securities and paid on deposits. Athanasoglou *et al*. (2008) studies on the banking profitability behavior of the south eastern European banking industry during 1998-2002 observed that there is a direct relationship between NIM and bank's profitability. Supported by N. Fredrick results of the study on Kenya banks which is similar to Egypt in being developing African country that Interest income has a positive effect on bank's performance represented in profitability.

- H_5: There is a positive linear relationship between net interest income and the profitability represented in the ROA and ROE of commercial banks in Egypt

Non-interest income; measured in the terms of non-interest income/ average earning assets ratio, is a related factor the non-interest income as a measure of diversification is an important factor affecting profitability according to the above chart conclusion in the USA. Banks provide many services other than lending and depositing money, i.e., credit and debit cards also charge fees for deposit services, processing loans and other services, banks also involve in capital market activities for example: underwriting, mergers and acquisitions, syndications, advisory, researches and a host of other services. For all the services offered, banks charge certain fees. Income earned through fees and other charges is called non-interest income. Ramadhani Khalid Mndeme in his study of Impact of non-interest income on banking performance in Tanzania, the study used a sample of 25 banks out of 49 and fixed effect panel regression model (FEM), the findings indicated that increase in share of non-interest income has negative impact on bank performance. Saunders in his study on US banks in the

period from 2002-2013 found that the higher ratio of non-interest income to interest income is associated with a higher profitability across the banking sector and under different market regimes. (Sanya and Wolfe, 2011) and Italian banks study (Chiorazzo *et al*., 2008) found non-interest income positively affect bank performance. While in other review identified one study for German banks by Hayden *et al*. (2007) was contradictory to many in the region arguing diversification represented by non-interest income ratio to be associated with reduction in bank return:

- H_6: There is a positive linear relationship between non-interest income and the profitability represented in the ROA and ROE of commercial banks in Egypt

External factors: Other macroeconomic variables that affect the performances of banks (Ongore and Kusa, 2013) they include the following: Economic Growth; regarded as Gross Domestic Product (GDP) is the broadest quantitative measure of a nation's total economic activity, more specifically, it represents the monetary value of all goods and services produced within a nation's geographic borders over a specified period of time according to Investopedia definition. Kamau and Were, indicated that there is a positive relationship between GDP and net interest margin that whenever the economy is performing well banks make better profits from the interest rate gains. Saeed (2014) examined the effect of bank-specific, industry-specific and macroeconomic variables on profitability of 73 UK commercial banks before, during and after the financial crisis of 2008 and over the period from 2006-2012, outcomes concluded that GDP has a negative impact on ROA and ROE (Profitability) while bank size, capital ratio, loan, deposits, liquidity and interest rate have positive impact. Ali and Ahmed (2011) studied the profitability in banks of Pakistan during the period 2005-2009, they used the Return on Assets (ROA) and Returns on Equity (ROE) as a measure of banks profitability, the results stated that economic growth and has a direct and significant relation with profitability while capitalization have inverse association with profitability. Ali and Ahmed (2011) study concluded that the GDP has significant and positive effect on profitability measured in the terms of ROA and ROE. Since GDP is an indicator of the economic health of a country, as well as a measure of a country's standard of living, it definitely affects banking sector in a way or another, so it is considered an important factor affecting banking performance in Egypt:

- H_7: There is a positive linear relationship between Economic Growth (GDP) and the profitability represented in the ROA and ROE of commercial banks in Egypt

Inflation Rate; Inflation is defined as a sustained increase in the general level of prices for goods and services. It is measured as an annual percentage increase. As inflation rises, the purchasing power of L.E. decrease, the role of Central Bank of Egypt is to control inflation through adjusting interest rate thus, affect the cost of funding of the banking sector. Tariq *et al*. (2014) studied the influence of determinants on the performance of commercial banks in Pakistan during the period from 2004-2010. Result indicates that inflation affects the bank's profitability inversely. Yilmaz study analyzed the determinants of profitability of banks in Turkey and in eight other emerging countries, the outcomes indicated that inflation, capitalization and bank size are significant determinants for banks performance. Jarrah *et al*. (2010) investigated the determinants of the Jordanian bank's profitability during 2000-2006 by using the co-integration and error correction models, findings stated that inflation is one of the most significant external determinants of banks profitability. Khrawish (2011) evaluated the profitability of commercial banks in Jordan during the time period 2000-2010, the outcomes find that there is the existent significant and negative relationship between profitability figured in ROA of the Jordanian commercial banks and inflation rate and annual growth rate for Gross Domestic Product (GDP):

- H_8: There is a negative linear relationship between Inflation rate and the profitability represented in the ROA and ROE of commercial banks in Egypt

MATERIALS AND METHODS

Participants: The population of this study is based on a convenient sample of the top 5 local and foreign commercial banks operating in Egypt from the total of 32 banks (2 local and 3 foreign banks). Raw data were obtained from published financial statements for the past 5 year 2011-2015 and the ratio analysis was done according to standard financial ratios calculations as follows: the capital adequacy: through calculating the means of equity capital/risk weighted assets. The loans loss provision: through the loss provisions to total gross loans ratio; the bank size: through the growth of total assets (Table 1).

The cost of efficiency through the cot to income ration. The net interest income: through the difference between interest received from assets and interest paid on

Table 1: Banks sample data (2011- 2015)

Bank sample	2015 (%)	2014 (%)	2013 (%)	2012 (%)	2011 (%)
National Bank of Egypt					
Return on Assets ROA	0.820	0.83	0.88	0.690	0.670
Return on Equity ROE	14.85	16.95	20.62	14.98	16.25
Liquidity ratio (Local Currency)	59.79	48.39	36.47	40.06	36.12
Capital adequacy ratio	10.53	10.04	10.53	10.82	11.30
Provisions/total loans	0.390	0.520	0.360	1.300	0.240
Total assets growth rate	24.70	14.04	4.910	2.140	15.27
Cost to income ratio (efficiency ratio)	37.15	44.92	41.79	53.36	37.03
Net income interest/average earning assets	3.100	3.77	3.180	2.290	2.650
Total Non-interest income/average earning assets	0.700	0.47	0.540	1.240	1.440
Gross Domestic Product (GDP)	2.200	2.10	2.200	1.900	5.100
Inflation rate	8.200	9.75	7.260	11.79	10.66
Commercial international bank					
Return on Assets (ROA)	2.600	2.640	2.370	1.890	2.660
Return on Equity (ROE)	25.27	25.04	20.48	18.38	23.27
Liquidity ratio (Local currency)	72.01	NA	NA	NA	NA
Capital adequacy ratio	14.05	13.55	13.59	15.40	16.92
Provisions/total loans	1.210	2.190	1.460	0.780	0.020
Total assets growth rate	26.43	21.07	9.950	13.40	17.39
Cost to income ratio (efficiency ratio)	29.77	28.27	30.93	40.47	42.50
Net Interest Income/average earning assets	5.500	5.580	4.970	4.880	4.490
Total Non- interest income/average earning assets	1.500	2.140	1.820	2.100	2.820
Gross Domestic Product (GDP)	2.200	2.100	2.200	1.900	5.100
Inflation Rate	8.200	9.750	7.260	11.79	10.66
Qatar National Bank*					
Return on Assets (ROA)	2.240	2.190	2.300	2.380	2.200
Return on Equity (ROE)	19.45	17.76	16.37	18.12	18.00
Liquidity ratio (Local currency)	NA	NA	NA	NA	NA
Capital adequacy ratio	16.20	15.60	14.87	14.81	15.41
Provisions/total loans	1.420	0.640	1.580	0.390	0.230
Total assets growth rate	27.16	21.46	6.960	2.740	14.40
Cost to income ratio (efficiency ratio)	19.44	30.31	30.72	36.80	45.83
Net interest income/average earning assets	4.600	4.570	4.570	4.310	4.200
Total Non- interest income/average earning assets	1.700	1.960	1.710	1.780	1.860
Gross Domestic Product (GDP)	2.200	2.100	2.200	1.900	5.100
Inflation rate	8.200	9.750	7.260	11.79	10.66
HSBC					
Return on Assets (ROA)	2.760	1.520	2.630	2.320	2.190
Return on Equity (ROE)	28.72	18.03	32.25	26.58	27.45
Liquidity ratio (Local currency)	NA	NA	NA	NA	NA
Capital adequacy ratio	15.75	16.10	12.67	13.00	12.56
Provisions/total loans	0.460	1.310	1.080	1.290	1.560
Total assets growth rate	9.180	8.600	11.66	7.090	24.91
Cost to income ratio (efficiency ratio)	27.73	45.22	30.84	33.54	31.34
Net interest income/average earning assets	5.400	5.300	4.840	6.800	4.380
Total non-interest income/average earning assets	1.700	1.030	1.890	2.990	2.710
Gross Domestic Product (GDP)	2.200	2.100	2.200	1.900	5.100
Inflation rate	8.200	9.750	7.260	11.79	10.66
Bank of Alexandria					
Return on Assets (ROA)	1.630	1.620	1.520	0.880	1.760
Return on Equity (ROE)	15.45	14.56	14.57	8.970	17.85
Liquidity ratio (Local currency)	NA	NA	NA	NA	NA
Capital adequacy ratio	15.50	15.43	14.35	16.38	14.27
Provisions/total loans	1.400	1.200	2.150	1.880	0.720
Total assets growth rate	8.450	-0.47	8.730	1.590	15.62
Cost to income ratio (efficiency ratio)	52.47	51.97	47.59	54.57	47.33
Net interest income/average earning assets	5.900	5.500	5.790	4.610	4.420
Total non-interest income/average earning assets	1.000	1.100	1.010	1.150	1.600
Gross Domestic Product (GDP)	2.200	2.100	2.200	1.900	5.100
Inflation rate	8.200	9.750	7.260	11.79	10.66

liabilities. The non-interest income: through calculating the non-interest income/average earning assets ratio. While both the Macro-Economic Ratios (GDP and Inflation rate) were obtained from published figures of the Central Bank of Egypt (Table 1).

Meanwhile, to test the linear relationship between this study's independent variables and its dependent variables, we used the correlation analysis (Pearson test) since all the data type is quantitative (scale) while we used the multiple linear regression analysis to test the suggested model gathered from the literature.

Table 2: Pearson's correlation test analysis results

Variables	ROA	ROE	Capital Adequacy Ratio (CAR)	Provisions/ total loans	Total assets growth rate	Cost to income ratio (efficiency ratio)	NII/average earning assets	Total non-interest income/average earning assets	GDP	Inflation rate
Return on assets										
Pearson correlation	1.000	0.696**	0.527**	0.096	0.282	-0.622**	0.610**	0.720**	0.053	-0.156
Sig. (2-tailed)		0.000	0.007	0.649	0.172	0.001	0.001	0.000	0.803	0.456
N	25.000	25.000	25.000	25.000	25.000	25.000	25.000	25.000	25.000	25.000
Return on equity										
Pearson Correlation	0.696**	1.000	-0.072	-0.063	0.339	-0.642**	0.320	0.582**	0.111	-0.197
Sig. (2-tailed)	0.000		0.731	0.765	0.098	0.001	0.119	0.002	0.597	0.346
N	25.000	25.000	25.000	25.000	25.000	25.000	25.000	25.000	25.000	25.000
Capital adequacy ratio										
Pearson correlation	0.527**	-0.072	1.000	0.150	-0.057	-0.004	0.561**	0.335	0.022	0.097
Sig. (2-tailed)	0.007	0.731		0.475	0.785	0.987	0.004	0.102	0.917	0.645
N	25.000	25.000	25.000	25.000	25.000	25.000	25.000	25.000	25.000	25.000
Provisions/total loans										
Pearson correlation	0.096	-0.063	0.150	1.000	-0.088	-0.020	0.482*	0.027	-0.392	-0.180
Sig. (2-tailed)	0.649	0.765	0.475		0.674	0.923	0.015	0.898	0.052	0.390
N	25.000	25.000	25.000	25.000	25.000	25.000	25.000	25.000	25.000	25.000
Total assets growth rate										
Pearson correlation	0.282	0.339	-0.057	-0.088	1.000	-0.592**	-0.054	0.268	0.337	-0.153
Sig. (2-tailed)	0.172	0.098	0.785	0.674		0.002	0.799	0.196	0.100	0.464
N	25.000	25.000	25.000	25.000	25.000	25.000	25.000	25.000	25.000	25.000
Cost to income ratio (efficiency ratio)										
Pearson correlation	-0.622-**	-0.642-**	-0.004-	-0.020	-0.592**	1.000	-0.157	-0.457*	0.071	0.349
Sig. (2-tailed)	0.001	0.001	0.987	0.923	0.002		0.453	0.022	0.734	0.087
N	25.000	25.000	25.000	25.000	25.000	25.000	25.000	25.000	25.000	25.000
Net interest income/average earning assets										
Pearson correlation	0.610**	0.320	0.561**	0.482*	-0.054	-0.157	1	0.357	-.282-	-0.140
Sig. (2-tailed)	0.001	0.119	0.004	0.015	0.799	0.453		0.080	0.171	0.503
N	25.000	25.000	25.000	25.000	25.000	25.000	25.000	25.000	25.000	25.000
Total non- interest income/average earning assets										
Pearson correlation	0.720**	0.582**	0.335	0.027	0.268	-0.457-*	0.357	1	0.350	0.360
Sig. (2-tailed)	0.000	0.002	0.102	0.898	0.196	0.022	0.080		0.086	0.077
N	25.000	25.000	25.000	25.000	25.000	25.000	25.000	25.000	25.000	25.000
Gross Domestic Product (GDP)										
Pearson correlation	0.053	0.111	0.022	-0.392-	0.337	0.071	-0.282	0.350	1	0.261
Sig. (2-tailed)	0.803	0.597	0.917	0.052	0.100	0.734	0.171	0.086		0.207
N	25.000	25.000	25.000	25.000	25.000	25.000	25.000	25.000	25.000	25.000
Inflation rate										
Pearson correlation	-0.156	-0.197	0.097	-0.180	-0.153	0.349	-0.140	0.360	0.261	1.000
Sig. (2-tailed)	0.456	0.346	0.645	0.390	0.464	0.087	0.503	0.077	0.207	
N	25.000	25.000	25.000	25.000	25.000	25.000	25.000	25.000	25.000	25.000

**Correlation is significant at the 0.01 level (2-tailed), *Correlation is significant at the 0.05 level (2-tailed)

RESULTS AND DISCUSSION

The correlation analysis findings show that the capital adequacy, net interest income and total non-interest income are positively correlated with the roa. The cost efficiency is negatively correlated with the roa while loan loss provisions, bank size, gdp and inflation rate are found to have no effect on the roa of the commercial banks in Egypt. Meanwhile, the findings show the total non- interest income is found to have a positive correlation with the roe, cost efficiency is negatively correlated with the roe, while loan loss provisions, bank size, net interest income, gdp and inflation rate are found to have no effect on the roe of the commercial banks in Egypt (Table 2).

Moreover, the Multiple Linear Regression findings show that 77% of the variation in the ROA of the commercial banks in Egypt is explained by (Capital Adequacy, Inflation rate and non-interest income) (Table 3) and that when the capital adequacy increases by 1 unit, the ROA increases by 0.106 unit given that all other variables are fixed and that when the Inflation rate decreases by 1 unit, the ROA increases by .197 given all other variables are fixed and that when the non- interest Income increases by 1 unit, the ROA increases by .835 given that all other variables are fixed (Table 4) while 61%

Table 3: Multiple Linear regression analysis: Model Summary-Return on Assets (ROA)

	Model summary[6]			
Models	R	R^2	Adjusted R^2	SE of the estimate (%)
1	0.928	0.861	0.791	0.32105
2	0.927	0.860	0.803	0.31190
3	0.927	0.859	0.812	0.30473
4	0.919	0.844	0.803	0.31163
5	0.907	0.823	0.788	0.32332
6	0.895	0.802	0.774	0.33408

Table 4: Multiple linear regression analysis: coefficients results-Rerum on Assets (ROA)

Coefficients[a]					
	Unstandardized coefficients		Standardized coefficients		
Model 6	B	SE	β	t-value	Sig.
(Constant)	0.910	0.595	-	1.530	0.141
Capital Adecuacy Ratio (CAR)	0.106	0.035	0.310	3.009	0.007
Total Non-interest income/ average earning assets inflation rate	0.835	0.117	0.785	7.135	0.000
	-0.197	0.044	-0.469	-4.500	0.000

Dependent variable: ROA

Table 5: Multiple linear regression analysis: model summary-Return on Equity (ROE)

	Model summary[e]			
Models	R	R^2	Adjusted R^2	SE of the estimate
1	0.848[a]	0.719	0.578	3.50533
2	0.847[b]	0.718	0.601	3.40841
3	0.847[c]	0.717	0.623	3.31543
4	0.834[d]	0.696	0.616	3.34287

Table 6: Multiple linear regression analysis: Coefficients Results- Return on Equity (ROE)

	Coefficients[a]				
	Unstandardized coefficients		Standardized coefficients		
Model 4	B	SE	β	t-value	Sig.
(Constant)	32.945	6.242		5.278	0.000
Capital Adequacy Ratio (CAR)	-1.200	0.416	-0.457	-2.884	0.010
Provisions/total loans	-2.391	1.299	-0.273	-1.841	0.081
NII/Average earningassets	1.947	0.974	0.378	1.999	0.060
Total non-interest incom/average earning assets	6.215	1.250	0.760	4.971	0.000
Inflation rate	-1.366	0.467	-0.422	-2.925	0.009

Dependent Variable: ROE

of the variation in ROE is explained by (capital adequacy, inflation rate, total non-interest income, loan loss provisions and net interest income) (Table 5) and that when the Inflation Rate decreases by 1 unit, the ROE increases by 1.366 given that all other variables are fixed when the total non- interest income increases by 1 unit, the ROE increases by 6.215 given that all other variables are fixed and when the Net Interest Income increases by 1 unit, the ROE increases by 1.947 given all other variables are fixed while when the capital adequacy decreases by 1 unit, the ROE increases by 1.200 given that all other variables and fixed and when the Loan Loss Provisions decreases by 1 unit, the ROE increases by 2.392 given that all other variables are fixed (Table 6).

CONCLUSION

This study contributes to the literature through shading lights on the financial performance of a sample of banks operating in one of the third world countries during a certain period that witnessed slow economic growth, ineffective economic policies as well as high rate of governmental and administrative bureaucracy and corruption. The study's findings indicate a sort of variance with the findings of other studies conducted in different countries and periods; however, we could contribute that to the political and economic nature of Egypt as one of the third world countries as well as the economic and political instability in which we have been living since the revolution that took place in 2011. Moreover, The high profitability achieved in that instable period by all banks and the public Egyptians banks in particular indicates that such banks, regulated by the Central Bank if Egypt, applied some successful monitory policies that maintained its strong financial position as well as sustained its annual profitability through highly concentrating on low risk operations through buying treasury bills offered by the government , putting very strict credit and lending policies and increasing their retail banking activities instead of lending mega projects as well as SMEs with enough funds that enables the country achieve its targeted annual growth rate which will positively affect the whole economy. Therefore, we see that despite that these practices enabled the banks operating in Egypt to achieve high profitability; however, this might contradict with their major role of banks specially the public ones in terms of sacrificing part of their profits for the sake of standing beside its economy in difficult times. To this end, we see that Egyptian banks should model the determinants of the banks performance for a better forecast and financial performance and to ensure prompt action in case of any unexpected changes in the economy and different policies. At the same time, the Central Bank of Egypt should introduce alternaive scenarios and action plans for the banks in case of fluctuation of the two macroeconomic independent variable inflation rate and GDP. Moreover, banks should act to improve their published financial ratios and to include wider range of performance ratios not only on annual or quarterly basis but also on monthly basis. Banks should also work on realizing new factors affecting their performance and coordinate with Central Bank of Egypt to overcome any problems they might affect their performance and profitability.

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