## PalArch's Journal of Archaeology of Egypt / Egyptology

# ANALYSIS OF THE POST IPO PERFORMANCE OF COMPANIES 

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#### Abstract

Juwairiyya Abubakar, Shabir Hakim Analysis of The Post Ipo Performance of Companies-- Palarch's Journal of Archaeology of Egypt/Egyptology 18(12), 74-86. ISSN 1567-214x


Keywords: Initial Public Offering, Performance of Companies, Stock Market


#### Abstract

The main purpose of this research is to understand the effect of an Initial public Offering (IPO) and the dynamics associated with raising money from the stock market. The importance of this research is to provide an empirical analysis of the aftermath of an IPO performance of companies in Nigeria, as previous studies include developed countries like U.S and china but there is still limited research on Africa's capital market and also stock performance. An event study method of research study is used to measure the impact of an event on stock performance. In this study, the event represents the "Initial public Offering". This study involves a sample of 6 companies that launched their IPO in 2009 was reviewed within a 10year interval from 2009- 2017.The six variables of financial performance indicators used in this study includes sales, net income, profitability ratios (return on assets and return on equity), weighted-cost of capital and market capitalization. A comparative review of all the companies the findings suggest the negative impact of an IPO as it affects the performance of companies.


## INTRODUCTION

According to Hertzel [1] Startups and other high technology enterprises need financing to expand their operations and business activities through expansion, product creation, research, development and innovation. So, entrepreneurs try to raise money and capital from the stock market by listing their company on the public stock exchange which represents an "Initial Public Offering", Also, a firm that performs efficiently after an IPO could issue out "Seasoned Equity Offerings" shortly after their (IPO) to raise more equity from the market. (SEO) is used for different reasons. Sometimes, firms are financially limited to the point of showing a negative cash flow and also, they have no available
assets to give out as the collateral required when borrowing money while some firms have some level of cash flows and liquid cash to still be in business [2].

Liu et al. [3] points out that an IPO represents a big decision to be taken at cooperate level for a company involving a strategy to efficiently utilize addition financial and physical resources. Recently, there are more efforts directed towards gaining more knowledge and understanding of an IPO [4] Wies and Moorman [5] contradicts Hertzel [1] by stating that as an IPO provides a source of funds and drives innovation of a company it could also expose them to some disclosure expectations and short-term motivation that could affect their level of innovation. The limitation on innovation includes involvement in less risky or small creativity and less of something new related to a firm's business operations.

Guo [6] relates performance to innovational abilities by using a sample 151 biotech IPO firms. He traced their innovation abilities by monitoring changes in product creation, patents, research expense and business collaborations of the sample between a 3years period after their (IPO) their findings, shows an abnormal IPO return and further research exhibits the importance of innovation to stock performance. Berstein [7] points out that innovation declines after going public. Therefore, a firm need to apply innovation strategies that they could easily rank their innovation performance [8]. Andriansyah and Mesinnis [9] extended the study on (IPO) performance by reviewing the link between the operating performance and the aim for the (IPO) proceeds when it is focused on stock and fixed asset investment. The study on the IPO earnings of 140 Indonesian listed companies between 2000 and 2010 exhibits a positive performance when (IPO) earnings are focused on investment in shares and fixed asset. Also, firms whose IPO returns are focused on sales promotion and marketing gain money from their offerings while does IPO intended for investment shows a value of 186.33 million [10].

Leverage revolves around the use of long-term debts and borrowings to increase the level of return of a company. The increase in leverage results into an increase in the risk and return while the decrease in leverage results into a decrease in risk and return. Wabwile et al. [11] points out that Leverage affects a firm's overall performance. So, those in the finance field focus their interest and efforts toward understanding the concept of financial leverage. Research by Nimalathasan and Valeriu [12] affirms that debt-equity ratio has a positive effect on profitability of a company by investigating some sample of listed manufacturing companies in Sri Lanka. Thaddeus and Chigbu [13] extended the study of leverage by an examination of the bank performance in Nigeria to see the outcome of using leverage as a source of capital. The results of his study exhibit the different positive conclusions which includes leverage as a source of capital increases the level of risk and return to the owners, it could also serve as productive business strategy, and also a factor to help companies reduce their uncertainty and risk level but for a company to attain efficiency in performance it needs find a balance between risk and return. Edsesiri [14] contradicts Nimalathasan and Valeriu [12] by stating that leverage behavior is negatively affected by profitability and a company size. More revenue for a firm does not imply the use of leverage. Thus, different
firm use different policies. Also, he mentioned that companies should embark on activities that increase their profitability and size, as size also represent asset which could be a source of internal financing. This could in future exhibit a positive sign on the firm's financial structure. His research includes a sample 120 listed companies on the Nigerian stock market within the period 1990-2013.

Abubakar [15] involves an analysis of the correlation between financial leverage and financial performance of 11 deposit money bank in Nigeria within the period of 2005-2013 with specification to how their debt-equity ratio and debts ratio affects their return on equity. The results of the research exhibit a negative connection between leverage and firm's performance when it is proxy to return on equity.

Share price represents the amount people are willing to pay to acquire a given level of stock. Understanding of the impact and relevance of a share price helps a company attain a better performance. Nigeria as a developed country directs a lot of efforts towards understanding and evaluating the determinants of the prices of equities in the secondary market. Assessment and critique of the share price comes from directors of the listed firms, traders, professional from security pricing, capital market spectators and stockbrokers and other exchange. Trading activities on the Nigerian stock exchange has been active for more than 35 years but still there are a lot of variations on the factors affecting the pricing of securities on the Nigerian stock exchange. Furthermore, when evaluating a company investor are interested to see to the historic prices of a company. Thus, this could serve as an indicator of operational performance of a company. A study on 30 quoted companies on the Nigerian stock exchange reviewed the rationale behind pricing on the stock market. And, the results of this study show a beneficial correlation between the market value of shares and its financial performance [16]. Recent, study on share price, investigates the relationship between macro-economic indicators and share price performance. After, the liberation of Nigerian economy in 1986 the stock exchange keeps on improving and constructing its operation thereby enhancing the development of the economy through provision of funding. This occurs after attaining liquidity which gives an opportunity to easily millions stock daily. The stocks are easily affected by the fluctuation of the macro-economy. There is a study conducted to measure the effect of the macro-economic indicators by examining a sample of 50 listed shares the stock market within eight sectors of market. Factual discoveries imply that diverse effects occur amidst share return and macro-economic indicators. Furthermore, the investigation suggests diminishing values of share return, inflation rate, crude oil price and interest rate as the major factors affecting the share returns [17].

## METHODOLOGY

This study provides more factual and quantitative data on the post-IPO performance of 6 different companies in Nigeria that launched their IPO in 2009, thus data for a period of 10 years after their IPO was collected to measure their performance. The selected 6 different companies in Nigeria are

UPDC, Honey Well, Transcorp Hotel, E- transact, Newrest Asl Nigeria and Portland paint.

The research includes an empirical research called an "event study" which helps to measure the impact of a certain event on a corporation such as issuing an Equity (IPO). Event studies suggest an arithmetical method of measuring the impact of a particular event in the firm. According to Sorescu et.al [18] event studies have gained interest t in different fields as it helps researchers to measure and confine the effect of a co-operate decision on a a firm. An event study examines the shift in a share price after a corporate event. This method of research was pioneered in finance fields then it diversified into other subjects of study like economics and marketing. Product creation, route reestablishment, merger and acquisition are all examples of situations for an event study. Lakshmi and Joshi [19] points out those researchers are concerned about the effect of an event on the stock performance and also the consequences of a particular decision or rule. An event methodology is practiced for an economy-wide and a firm specific event. This includes a broad cast of corporate earnings, dividend payments, Alliances etc.

Event studies involve a factual finance method of research that studies and measures the impact of a particular event on the stock price of a company. The common method starts with an estimate of the price with the non-occurrence of the event. The anomalous return is derived from subtracting the actual stock return and this benchmark. Anomalous return could also be calculated using the difference stock return and market index. Previous researchers use a "market model" to determine the abnormal returns. A market model involves an index model which states that returns are estimated by the firm and also market related factor. Thus, expressed as:
$r t=\mathrm{a}+\mathrm{brMt}+\mathrm{et}$
where, a is the average return stock generates in the zero-return period, rt represents the current market return while et are returns from an event attributed to a particular organization [20]. Another method of calculating the anomalous return involves predicting the return on stocks at the time of the event represented mathematically as:
$R i t=\alpha \mathrm{i}+\theta \mathrm{i} \mathrm{Mt}+\varepsilon \mathrm{it}$
Where, Rit represents the return on the stock at the time i and t , eit is occurrence date for the event. Also, MT is the market return for the time $t$ [21].

## RESULT AND DISCUSSION

## UPDC

## Sales

The mean or average sales for this company for 10 years after the IPO is 3427.4, Also the standard deviation or variation in sales over the 10 years is 4057. The minimum sales are 417 in year 2014 while the maximum sales are 11354.4 in year 2015. There is a gradual fall in the sales for the first two years then it increased shortly in 2014, it reached its peak in 2015 and a gradual decline in the last two years.

## Net Income

The mean or average for net profit over 10 years post-(IPO) is 11.65 , the standard deviation is 31.12 , then the minimum net profit is -46.02 in year 2012 while the maximum net income is 42.04 in year 2010. The Net income was stable for the first two years before it plunged from 2011 to 2012. It increased sharply in 2013 and then gradually in until 2015 before it started a gradual decline from 2016 to 2017.

## ROA

The mean or average for the return on assets is 2.74 over 10 years' post (IPO), the standard deviation is 9.64 , also the minimum is -11.23 in year 2013 while the maximum is 17.62 in year 2012. The ROA rose steadily between 2013 and 2014. There was a sharp increase in ROA until it hit a peak in 2015 then fell gradually in the last two years.

## ROE

The mean or average of return on equity for 10 years after the launch of IPO is 6.93, then the standard deviation or variation is 27.3 , also the minimum is 27.6 in 2013, then the maximum is 55.5 in 2012. The ROE rose gradually in the first two years then it dropped continuously over the last two years after reaching a peak in 2015.

## Market Capitalization

The average market cap or size is 26683 over the 10 years after their initial offering, the variation or standard deviation is 0.00013416 , then the minimum and maximum is 26683 because the size remained stable for the 10 years post(IPO).

WACC
The average or mean of the WACC after their IPO is 6.80 , then the standard deviation or variation of their WACC is 3.1, also the minimum WACC is 2.8 in 2014, then the maximum is 11.7 in 2012. From the graph, there was a sharp increase in WACC from 2011 until it hit a peak in 2012 before experiencing a
gradual fall was stable at first in the next two years. The WACC increased sharply after reaching a bottom in 2014 and then plunged between 2015 and 2017.

## HONEY WELL

## Sales

The mean or average sale for this company for 10 years after the IPO is 43131.20. Also, the standard deviation or variation in sales over the 10 years is 9738.9. The minimum sales are 28580 in year 2016 while the maximum sales are 55084.31 in year 2014. There was a steep fall in the sales in 2011 than it rose gradually until it remained stable from 2013 to 2014 it plummeted again hitting a bottom in 2015. The sales rose steadily in the next two years.

## Net Income

The mean or average for net profit over 10 years post-(IPO) is 3.93 , the standard deviation is 4.46, then the minimum net profit is -5.94 in year 2016 while the maximum net income is 8.09 in year 2017. The net income fell gradually from 2010 till it reached a bottom in 2016 before sharply increasing in 2017.

## ROA

The mean or average for the return on assets is 4.12 over 10 years' post (IPO), the standard deviation is 3.9 , also the minimum is -4.20 in year 2013 while the maximum is 8.43 in year 2011. There was a gradual fall in ROA in 2012. It was stable for a year before it steadily rose in 2014 then plunged hitting a bottom in 2016 and then rose steadily in 2017.

## ROE

The mean or average of return on equity for 10 years after the launch of IPO is 10.15 , then the standard deviation or variation is 11.47 , also the minimum is 16.49 in 2016, then the maximum is 17.40 in 2011. The ROE remained stable for two years after a gradual fall in 2011. It dropped gradually in 2015 then plummeted in 2016 and then increased sharply in 2107.

## Market Capitalization

The average market cap or size is 21887.35 over the 10 years after their initial offering, the variation or standard deviation is 9720.1 , the minimum is 10309.3 in 2016 and maximum is 40444.02 in year 2010 for the 10 years post(IPO). There was a steady rise in the Market Capitalization from 2011 to 2013 when it hit a peak. It plunged in 2014 and then continues to fall gradually in 2015. The Market Capitalization increased sharply in 2017.

## WACC

The average or mean of the WACC after their IPO is 4.84 , then the standard deviation or variation of their WACC is 4.07 , also the minimum WACC is 1.57 in 2013, then the maximum is 12.67 in 2009. The WACC hit a bottom in 2012 after a gradual drop. It then rose steadily reaching a peak in 2015.

## E- TRANZACT

## Sales

The mean or average sale for this company for 10 years after the IPO is 4290.60. Also, the standard deviation or variation in sales over the 10 years is 3651. The minimum sales are 757.18 in year 2010 while the maximum sales are 10404.50 in year 2017. There was a steady increase in sales from 2010 to 2013 when it hit a peak before plunging in 2013.

## Net Income

The mean or average for net profit over 10 years post-(IPO) is 0.90 , the standard deviation is 12.14 , then the minimum net profit is -23.07 in year 2010 while the maximum net income is 16.19 in year 2009. The net income increased steadily in 2011 and then plunges a little in the next year before rising gradually in 2013. The net income remained stable between 2015 and 2016.

## ROA

The mean or average for the return on assets is 4.14 over 10 years' post (IPO), the standard deviation is 6.84, also the minimum is -5.91 in year 2010 while the maximum is 13.43 in year 2016. The ROA plunged and hit a bottom in 2012. There was a sharp increase in ROA in 2013. Then it rose gradually to hit a peak in 2015.

## ROE

The mean or average of return on equity for 10 years after the launch of IPO is 6.74 , then the standard deviation or variation is 9.77 , also the minimum is 6.29 in 2010, then the maximum is 21.81 in 2016. The ROE plunged and hit a bottom in 2012. There was a sharp increase in ROA in 2013. Then it rose gradually to hit a peak in 2015.

## Market Capitalization

The average market cap or size is 17188.50 over the 10 years after their initial offering, the variation or standard deviation is 4244.4, the minimum is 10752 in 2013 and maximum is 21000 in year 2016 for the 10 years post-(IPO). From the graph, Market Capitalization kept rising and falling continuously hitting a bottom in 2013 and a peak in 2016.

## WACC

The average or mean of the WACC after their IPO is 7.14 , then the standard deviation or variation of their WACC is 2.20 , also the minimum WACC is 4.50 in 2015, then the maximum is 11.65 in 2009. From the graph, the WACC kept rising and falling continuously hitting a bottom in 2012 and a peak in 2016.

## TRANSCORP HOTEL

## Sales

The mean or average sale for this company for 10 years after the IPO is 14134.15. Also, the standard deviation or variation in sales over the 10 years is 893.60, the minimum sales is 12995.15 in year 2009 while the maximum sales is 15348.72 in year 2013. The Sales for Transcorp Hotel rose steadily in 2010 then fell gradually in two years. The sales increased sharply reaching a peak in 2013 and then plunges the next year.

## Net Income

The mean or average for net profit over 10 years post- (IPO) is 28.58 , the standard deviation is 9.40 , then the minimum net profit is 19.37 in year 2017. The maximum net income is 50.69 in year 2011. The net income kept on increasing and falling. The net income hit a peak in 2011 and a bottom in 2012.

## ROA

The mean or average for the return on assets is 8.35 over 10 years' post (IPO), the standard deviation is 7.06 , also the minimum is 2.80 in year 2017 while the maximum is 22.02 in year 2010. In 2012, the ROA plunged and hit a bottom before a sharp increase in 2013 when is reached a peak.

## ROE

The mean or average of return on equity for 10 years after the launch of IPO is 15.96, then the standard deviation or variation is 18.41 , also the minimum is 4.96 in 2010, then the maximum is 58.18 in 2016. The ROE hit a peak in 2013 after sudden increase. It plummeted in 2014 and then rose steadily in the next two years before falling again in 2017.

## Market Capitalization

The average market cap or size is 45577.09 over the 10 years after their initial offering, the variation or standard deviation is 8572 , the minimum is 37850.01 and maximum is 54798.1 for the 10 years post-(IPO).

## WACC

The average or mean of the WACC after their IPO is 8.36 , then the standard deviation or variation of their WACC is 3.18 , also the minimum WACC is
3.66 in 2015, then the maximum is 11.65 in 2010. The WACC hit a bottom in 2015 when it plunges then a sharp increase in 2016.

## NEWREST ASL NIGERIA

## Sales

The mean or average sales for this company for 10 years after the IPO is 3929.98 Also the standard deviation or variation in sales over the 10 years is 893.60 , the minimum sales is 3501.26 in year 2014 while the maximum sales is 5072.35 in year 2017. The sales have increased and fell continuously over the years by about $15 \%$. Then it reached a peak of about $27 \%$ in 2016 and dropped by about $15 \%$ in 2017.

## Net Income

The mean or average for net profit over 10 years post- (IPO) is 28.58 , the standard deviation is 9.40 , then the minimum net profit is 19.37 in year 2017. The maximum net income is 50.69 in year 2011. The net income dropped from $50 \%$ in 2010 to $-150 \%$ in 2017 with two peaks of $100 \%$ in 2013 and 2015.

## ROA

The mean or average for the return on assets is 8.35 over 10 years' post (IPO), the standard deviation is 7.06 , also the minimum is 2.80 in year 2017 while the maximum is 22.02 in year 2010. The ROA has been fluctuating between $70 \%$ and $-70 \%$ from 2011 to 2106. Then it dropped sharply from 2016 to 2017.

## ROE

The mean or average of return on equity for 10 years after the launch of IPO is 15.96, then the standard deviation or variation is 18.41 , also the minimum is 4.96 in 2010, then the maximum is 58.18 in 2016. Similar to ROA, the ROE fluctuates between 2011 and 2016 and dropped sharply in 2017.

## Market Capitalization

The average market cap or size is 45577.09 over the 10 years after their initial offering, the variation or standard deviation is 8572 , the minimum is 37850.01 and maximum is 54798.1 for the 10 years post-(IPO). The Market Capitalization is high except between 2013 and 2016 where it fluctuates as a result of the changes in ROA and ROE.

## WACC

The average or mean of the WACC after their IPO is 4.43 , then the standard deviation or variation of their WACC is 1.19398 , also the minimum WACC is 2.57 in 2015, then the maximum is 6.32 in 2011. The change is generally low except between 2015 and 2016 where it rose to about $70 \%$ before dropping sharply again in 2017.

## PORTLAND PAINT

## Sales

The mean or average sales for this company for 10 years after the IPO is 2357.62 Also the standard deviation or variation in sales over the 10 years is 411.349, the minimum sales are 1711.42 in year 2009 while the maximum sales is 2865.58 in year 2013. The percentage has progressively dropped from $18 \%$ in 2010 to about - $23 \%$ in 2016 with intermittent spikes.

## Net Income

The mean or average for net profit over 10 years post-(IPO) is 2.57 , the standard deviation is 7.658685 , then the minimum net profit is -10.74 in year 2016. The maximum net income is 12.43 in year 2009. The net income fluctuates from 2012 to 2017 with a sharp increase in 2015.

## ROA

The mean or average for the return on assets is 1.70 over 10 years' post (IPO), the standard deviation is 9.38635987 , also the minimum is -11.16 in year 2016 while the maximum is 13.90 in year 2011. The ROA dropped to about $-200 \%$ in 2012 and 2016 with sharp increase to $150 \%$ in 2015.

## ROE

The mean or average of return on equity for 10 years after the launch of IPO is 21.58 , then the standard deviation or variation is 33.70011 , also the minimum is -56.36 in 2017, then the maximum is 46.94 in 2010. This shows a similar trend as ROA.

## Market Capitalization

The average market cap or size is 1703.69 over the 10 years after their initial offering, the variation or standard deviation is 472.137189 , the minimum is 720.00 and maximum is 2200.00 for the 10 years post-(IPO). The market capitalization fluctuates between $25 \%$ and $-25 \%$ from 2011 to 2016. Then it rose sharply between 2016 and 2017.

## WACC

The average or mean of the WACC after their IPO is 6.34 , then the standard deviation or variation of their WACC is 2.88368547 , also the minimum WACC is 3.42 in 2016, then the maximum is 11.47 in 2010. WACC fluctuates from 2010 to 2017 with a peak of about $40 \%$ in 2014.

## OVERALL DISCUSSION

## Effect of IPO Issuance on The Variables

Figure 1 demonstrates that majority of the sample companies shows an increase in sales which is the revenue, so the IPO has a positive impact on the output. Figure 2 demonstrates that majority of companies exhibit a decrease in net income which signifies the income of a company after all expenses have been accounted for, therefore an IPO has a negative impact on the output. Figure 3 demonstrates that majority of companies showcase a decrease in return on asset and this is an important variable for measuring profitability, thus an IPO has a negative impact on the output. Figure 4 demonstrates the graph exhibits a decrease in the ROE, so an IPO has a negative impact on the output. Figure 5 demonstrates the graph exhibits a decrease of WACC and this serves as a measure of risk so the IPO has a negative impact on the output.

## CONCLUSION

The main aim of this study is the provide factual data about the post-IPO performance of companies which the goal of making easier for people to make that big decision of whether to go public and furthermore, this helps people to understand the dynamics involved in raising money from the stock exchange. For this research data was collected from 6 different companies that launched their IPO in 2009, thus data for a period of 10 years after their IPO was collected to measure their performance. This paper used an event study method and it included statistic measures like mean, standard deviation, minimum and maximum, profitability ratios, WACC, net income and market cap. The results from the percentage change from each variable used exhibits a decrease in the variable so the overall outcome of this research is negative. Therefore, this study concludes that the initial public offering (IPO) has a negative impact on the performance of company.



Figure 3: Effect of IPO issuance on ROA for the selected companies in Nigeria


Figure 4: Effect of IPO issuance on ROE for the selected companies in Nigeria
effects on WACC


Figure 5: Effect of IPO Issuance on WACC For the Selected Companies in Nigeria

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