



MARKET REACTION TO INTERNATIONAL CROSS-LISTING: EVIDENCE FROM NIGERIA

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Abstract:

This paper examines market reaction to international dual listings. The sample consists of the only six (6) firms that cross-listed their equity abroad and which are also listed in the Nigerian Stock Exchange. The market reaction to a cross-listing program is positive and seen as a welcoming development to the selected companies and their shareholders at large. The stock price reaction is related to choice of exchange, geographical location (i.e., emerging or developed markets), and avenues for raising equity capital (i.e., public versus private offerings).

Keywords (Cross-listing, market segmentation, Investor protection, Market liquidity, Information disclosure, Nigerian firms)

INTRODCUTION

Globalisation of the marketplace for capital has fostered remarkable competition among the major foreign stocks exchange to take advantage of the growing demand and supply for cross-border equity flows. During the 1980s, individuals and institutions began investing funds in foreign equity markets to diversify their portfolios and to earn higher risk-adjusted yield than was possible with a fully domestic portfolio (12). This is as a result of the liberalization of cross-border capital flows has significantly reduced investment barriers between national capital markets and opened up possibilities for firms to raise capital in international markets through cross-listing (7). Considerably, in response to globalisation and liberalisation of cross-border capital flow over the two decades, an increasing number of companies have chosen to raise capital beyond the border of their home market. Academics have identified a host of reasons to explain why some firms list their stocks on a foreign exchange, which include hypotheses relating to investor recognition, access to capital, protection of minority shareholders,

visibility, and improvement in the information environment among others motives (22). Reference (22) investigate 153 foreign companies that list their shares in the U.S. and find the abnormal returns around such listings to be consistent with improvement in investor recognition as well as the greater liquidity these firms achieve upon their listing in the U.S. According to Bank of New York, in recent years the numbers of firms that choose to cross-list, as well as the volume of foreign trading in cross-listed stocks, remain considerable. In particular, in 2012 the global trading volume of foreign-listed stocks was 157 billion depositary receipts (DR) with a trading value of US\$2.79 trillion (7). However in more recent years, increased capital market integration due to deregulation and significant technological advances in equity trading, such as electronic trading, have made equity trading in foreign markets more feasible for investors and, thus, have potentially reduced the need for firms to cross-list. Despite these significant changes, foreign listing and trading of a firm's shares remain important. This



can potentially be attributed to the fact that significant differences across markets still exist in the level of information costs, equity trading costs and investor protection.

One of the objective of this paper is to discuss the motives why companies chose to be cross-listed in an overseas stock as international cross-listing has increasingly becoming popular among Nigerian companies in recent years, with the number of cross-listing from just 1 in 2005 to 6 by April 2014 and a lot more of companies have signal willingness to be listed in overseas stock market. The paper also examines the impact of the cross-listing of stocks on firm value in the foreign stock markets by analyzing market reaction around the date of the announcement.

LITERATURE REVIEW

Explanations for valuation gains around cross-listings

Much of the existing literature on international cross-listings argues that the benefits stem from a lower cost of capital as the firm makes its shares more accessible to nonresident investors who would otherwise find it less advantageous to hold the shares because of barriers to international investment (12). Reference (11) present evidence of positive valuation gains for firms that cross-list on Anglo-Saxon stock exchanges. These results contrast with earlier studies that report an insignificant stock price reaction in the listing month for US firms listing their shares in London, Tokyo, Toronto, or continental Europe (13). This section provides a short overview of the different explanations for the valuation gains to cross-listings put forward by recent theoretical and empirical research.

Market segmentation

Dual listing can be rationalized by the existence of market segmentation. Segmentation can arise from direct barriers (e.g., ownership restrictions and taxes) or from indirect barriers (e.g., information availability, differences in accounting standards or liquidity risk). References (19) suggest that dual listing on foreign capital markets can circumvent market segmentation, thus increasing firm value and lowering the cost of capital (14). The traditional argument for why cross-listing augments firm value is that it overcomes international investment barriers

and thus leads to a reduction in the cost of capital, as the risk premium resulting from the investment barriers dissipates (8). According to the market segmentation hypothesis, the valuation gain around the cross-listing thus depends on the degree to which the home country is integrated in the world market (14).

Reference (14) finds that cross-listings on US markets are associated with significantly higher announcement returns for firms from emerging countries than for firms from developed markets. Reference (10) emphasizes the importance of access to external capital markets, especially for emerging markets firms. Reference (12) finds that the expansion of ADR programs originating from 12 emerging markets is associated with greater integration with world markets.

Market liquidity

Liquidity is appreciated by investors because transaction can be executed easier and with less impact on the share price. Thus better liquidity means lower risk on that perspective (6); (1); (2); (13). Cross-listing can lower the cost of capital through additional liquidity and by making the price discovery better due to the easier access to the information. Reference (1) state that greater liquidity should turn into lower cost of capital since shareholders value liquidity (the liquidity theory). Better liquidity means that transactions can be executed easier and with less impact on the share price.

Cross-listings on deeper and more liquid equity markets could lead to an increase in the liquidity of the stock and a decrease in the cost of capital. Reference (12) show that cross-listings of Canadian firms in the US are associated with an increase in trading volume and a decrease in effective spreads. Reference (20) document a substantial increase in the combined value of trading for a sample of foreign listings on NYSE. Silva and Chávez (2008) find that Latin American firms with an ADR do not always exhibit a liquidity advantage in the local market.

Information disclosure

Cross-listing on a foreign market can affect a firm's information environment. Reference (18) argue that



strict listing and accounting regulations deter cross-listings. However, reference (8) show that firms can use a cross-listing on markets with stringent disclosure requirements to signal their quality to outside investors. Some exchanges have more stringent disclosure requirements than others, but cross-listings do not affect the information environment of firms through compulsory disclosure alone. For example U.S. capital markets typically require more disclosure than the listing firms' home capital markets.

Investor protection

Reference (4) and (20) argue that firms can “bond” themselves by cross-listing on a stock exchange with higher standards of investor protection in order to protect minority shareholders. Reference (8) model the cross-listing decision as a trade-off between private benefits of control and taking advantage of growth opportunities by using bonding to reduce the cost of capital. They show that companies with a cross-listing in the US have a higher valuation than non-cross-listed corporations, especially when they have high growth opportunities. Reference (8) and (16) support the benefits of bonding hypothesis. They notice that companies listing from emerging markets usually have highly concentrated ownership which can lead to expropriation of minority shareholders. Cross-listing (US evidence) increases the disclosure and thus makes it more difficult for major shareholder to expropriate cash flows. In addition, authors suggest that increased monitoring should decrease the cost of debt. Also the empirical evidence of studies by Reference (8) suggest that there is a clear relation between cross-listing and achieving better minority shareholder protection.

Reference (8) and (16) finds that the voting premiums of firms with dual class shares are considerably lower for cross-listed firms. Reference (4) challenge the legal bonding hypothesis for cross-listings in the US. Bonding may also play a role for non-US exchanges, although to a lesser extent. Reference (4) argues that even informed investors do not assess individual rules and standards but only consider the general reputation of regulatory packages in their pricing. Hence, issuers can potentially capture a bonding premium when they list in any destination market with stricter legal investor protection than their home country. Reference (10) suggest that if corporate governance is improved the

interests of the investors will be guaranteed and Modigliani & Miller traditional corporate value will be increased. Consequently the stock price and returns will also be increased. Closely related to bonding theory, the signalling theory suggests that cross-listing is a way for managers to convey information about firm's future prospects and quality (6).

Access to more developed capital markets

By listing in the U.S., firms can issue securities in the U.S. Since the U.S. capital markets are deep and liquid, foreign firms can raise funds at lower cost than at home. Reference (8) show that firms that list in the U.S. become less credit-constrained in that their new investment depends less on their cash flow after the U.S. listing than before. With this benefit, firms that expect to have to raise funds would be more likely to list in the U.S. and firms that do not anticipate the need to raise funds would have no reason to list (8).

METHODOLOGY

The study adopts an event study methodology to analyze market reactions to the international cross-listing of stocks and the impact of international cross-listing on firm value around the event period. Since cross-listing is a decision made at the firm level, the impact on firm value will influence the firm's decision to cross-list or not. Event study methodology has been used extensively in finance, economics and political economy literatures to empirically estimate market reactions to specific events by studying the reactions of relevant variables around the event window. The methodology has been applied to a variety of firm specific and economy wide events.

The methodology is based on the assumption that capital markets are efficient and the effects of an event will be reflected immediately in the stock price. The main thrust of the methodology is that if an event contains information that alters expectations concerning future cash flows, the release of such information will cause a change in investors' estimates of the probability distribution of the firms' future share price and this may result in a change in the current price. The event study methodology is used to gauge the effects at the individual stock level rather than the market level. This is because findings at the market level are likely to be distorted by other



changes taking place contemporaneously. In its application of event study methodology, this study follows the approach outlined in MacKinlay, which consists of the following steps:

- Define the event and identify the event window;
- Select the sample of countries, stock markets, and firms to be included;
- Select the non event window to measure the normal return;
- Estimate the abnormal return; and
- Test whether the abnormal return is statistically significant.

This study adopts the market model, which provides a linear specification of the return of the given stock to the return of the market portfolio. This model is adopted because it reduces the variance of abnormal returns by removing the portion of the stock return that is related to variation in the market return. The market model is specified as:

$$R_{it} = a_i + b_i R_{mt} + \varepsilon_{it}$$

(1)

Where: R_{it} and R_{mt} are the returns on stock i and the market respectively at time period t . ε_{it} is the error term.

The abnormal return is obtained as:

$$AR_{it} = R_{it} - (\hat{a}_i + \hat{b}_i R_{mt})$$

(2)

The abnormal return is the error term of the market model calculated on an out-of-sample basis.

Abnormal returns are averaged across the observations for period t for all events N using:

$$\overline{AR}_t = \frac{1}{N} \sum_{i=1}^N AR_{it}$$

(3)

In addition, cumulative average abnormal returns (CAR) were calculated for the seventy-five days estimation period from day -60 to day +15.

$$CAR(T_1, T_2) = \sum_{t=T_1}^{T_2} \overline{AR}_t$$

(4)

$CAR_i(T_1, T_2)$ is the sum of the average abnormal returns from time T_1 to T_2 where. T_a is the upper limit and T_b is the lower limit of the event window. $a < T < T \leq T_2$

This study also performs a nonparametric sign test of the abnormal returns. The sign test is based on the sign of the abnormal returns, and it requires that the abnormal returns (or cumulative abnormal returns) are independent across securities and that the expected proportion of positive abnormal returns under the null hypothesis is 0.5. The null hypothesis is $H_0: p \leq 0.5$ and the alternative is $H_A: p > 0.5$ where $p = \text{pr}[AR_i \geq 0.0]$.

The test statistics are (Z stat):

$$Z - \text{statistic}_t = \frac{TSAR_t}{\sqrt{\sum_{j=1}^N \frac{D_j - 2}{D_j - 4}}}$$

(5)

3.1 Hypothesis testing

H₁ = Does cross-listing increase firm's value

H₂ = Does the market react positively or negatively to cross-listing announcement

Data

The initial sample consists of 6 cross-listings identified from data compiled by the Nigerian Stock Exchange (NSE), from stock exchange websites, and from lists obtained from stock exchanges' research and information departments. The sample includes the cross-listing of common shares. Historical share price for the periods under review for each of the 6 cross-listed companies were gotten from Central Securities Clearing System (CSCS) database and the NSE All Share Index historical prices were gotten from Datastream.

We measured stock price reactions around the announcement date instead of the listing date. Reference (19) point at potential problems in the



identification of announcement dates. However, Reference (8) emphasize that in efficient markets, investors' expectations regarding the change in the valuation of the firm as a result of the cross-listing are incorporated into stock prices immediately. Consequently, studying stock price changes around announcement dates enhances the assessment of the market's reaction to cross-listings. Research on stocks that move from the OTC or Nasdaq to NYSE also underlines the importance of using announcement rather than listing dates, see (18). Announcement dates are identified by a search of all company news using Bloomberg, Reuters and as well as corporate press release, for up to one year before the listing date. As identifying exact announcement dates is crucial for our analysis, we conduct an extensive search for the first announcement of the cross-listing and discard firms for which there are any doubts about this date.

FINDINGS AND DISCUSSION

Using the event study methodology, the study examines the impact of foreign cross-listing on firm value, concentrating on the effect around the date of

announcement. The event study methodology in equations 1 to 5 is applied to the stock market data of cross-listed firms. The sample is constructed from data compiled from the NSE and various companies' website. A firm must have an identifiable announcement date to be included in the sample. In addition, stock market data are required starting from 60 days before the announcement and ending 15 days after the announcement.

Data on the daily closing prices were used to compute daily total returns for each underlying stock, and NSE all share index was used to compute the market returns. Data on closing prices and the NSE index were obtained from the Datastream. To obtain abnormal returns, the study estimates a market model for each firm using daily returns and a market capitalization weighted index for the NSE. Market model parameter estimates are first estimated for the nonevent period (from day -60 to day -15) using ordinary least squares (OLS) regression. Abnormal returns are determined by the prediction errors from the OLS market model. Parameter estimates from the nonevent window model are used to calculate abnormal returns from day -5 to day +5.

	<i>ECOBANK</i>	<i>OANDO</i>	<i>GUARANTY</i>	<i>DIAMONDBNK</i>	<i>ZENITHBANK</i>	<i>DANGCEM</i>
Mean	-2.625E-18	-7.13E-19	-1.8831E-19	-4.2084E-20	-7.019E-19	-4.28E-20
Standard Error	0.0102366	0.0026771	0.004311	0.00223201	0.00176039	0.0018091
Median	0.0079085	-0.000357	0.00131661	-0.00043746	-0.0003021	0.0008106
Standard Deviation	0.0892405	0.0233385	0.0375824	0.01945821	0.01534671	0.0157713
Kurtosis	50.375049	-0.299396	19.8760187	0.28649562	0.90336263	4.8392865
Skewness	-6.4476835	-0.232438	-3.29811668	0.32022946	0.46109851	0.4830312
Minimum	-0.6959657	-0.050677	-0.2357568	-0.04946352	-0.034149	0.0531113
Maximum	0.0660563	0.0480559	0.05202977	0.04835274	0.04916812	0.0480409
Count	76	76	76	76	76	76
Confidence Level(95.0%)	0.0203923	0.0053331	0.00858795	0.00444639	0.00350687	0.0036039

Table 1: Descriptive Statistics

Guaranty Trust Bank Plc

Table 1 presents a summary of descriptive statistics of the dependent and independent variables used in the study. Descriptive statistics show mean, median, minimum, maximum, standard deviation, skewness and kurtosis.

Guaranty Trust Bank plc is a foremost Nigerian financial institution with vast business outlays spanning Anglophone/Francophone, West Africa, East Africa and the United Kingdom. The Bank presently has an Asset Base of over 2 Trillion Naira, shareholders funds of over 200 Billion Naira and



employs over 10,000 people in Nigeria, Cote d'Ivoire, Gambia, Ghana, Kenya, Liberia, Rwanda, Sierra Leone, Uganda and the United Kingdom. The Bank has a corporate banking bias and strong service culture that have enabled it record consistent year on year growth in clientele base and key financial indices since its inception in 1990 (2). On 28th July, 2007, the company announced its intention to list an offering of \$750 million Global Depository Receipts (GDRs) on the London Stock Exchange (LSE). The listing is the first of its kind by any Nigerian bank on this scale. A third of the offer, amounting to US\$250 million, according to a statement from the bank, is being offered to Nigerian investors, while the balance of US\$500 million is available to foreign institutional and individual investors (2).

Abnormal returns around the date of cross-listings are positive and statistically insignificant. This shows that cross-listing does not increase firm value therefore we reject the null hypothesis that cross listing increase firm value. The returns at the event itself are insignificant but positive. For day -1 the average abnormal return is 0.057 percent (CAAR = 5.3 percent) with a z-statistic of -0.151. The average abnormal return for day 0 is 4.24 percent (CAAR = 9.59 percent) with a z-statistic of 1.12. For day +1 the average abnormal return is 0.0008 percent (CAAR = 9.59 percent) with a z-statistic of 0.002. However the market reacted positively to the announcement of the cross-listing.

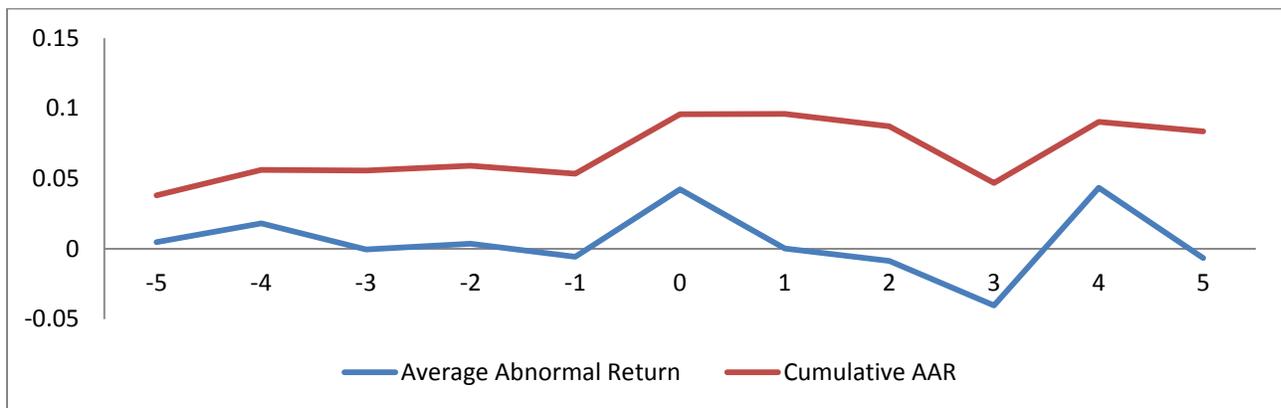


Figure 1:

Zenith Bank Plc

Zenith Bank Plc was established in May 1990, and commenced operations in July of the same year as a commercial bank. The Bank became a public limited company on June 17, 2004 and was listed on the Nigerian Stock Exchange (NSE) on October 21, 2004 following a highly successful Initial Public Offering (IPO). Zenith Bank Plc currently has a shareholder base of about one million and is Nigeria's biggest bank by tier-1 capital. In March 2007, Zenith Bank was licensed by the Financial Services Authority (FSA) of the United Kingdom to establish Zenith Bank (UK) Limited as the United Kingdom subsidiary of Zenith Bank Plc. Zenith Bank also has subsidiaries in: Ghana, Zenith Bank (Ghana) Limited; Sierra Leone, Zenith Bank (Sierra Leone) Limited; Gambia, Zenith Bank (Gambia) Limited. The bank

also has representative offices in South Africa and The People's Republic of China. The Bank plans to take the Zenith brand to other African countries as well as the European and Asian markets (21). On 22nd November, 2012, Shareholders of leading Nigerian lender, Zenith Bank Plc, endorsed the move by the financial institution to effect a dual listing of its shares on the London Stock Exchange (LSE) through a Global Depository Receipt (GDR). The approval which was given at the bank's Extra-ordinary General Meeting (EGM) in Lagos will see the GDR raise liquidity for the company from emerging markets (21).

Abnormal returns around the date of cross-listings are positive and statistically insignificant. This shows that cross-listing does not increase firm value therefore we reject the null hypothesis that cross listing increase firm value. The returns at the event itself are insignificant but positive. For day -1 the average abnormal return is -2.0 percent (CAAR =



0.003 percent) with a z-statistic of -1.05. The average abnormal return for day 0 is -1.0 percent (CAAR = -0.002 percent) with a z-statistic of -0.37. For day +1 the average abnormal return is -0.009 percent (CAAR

= -1.1 percent) with a z-statistic of -0.56. as in the case of Zenith bank the market reacted negatively to the announcement of cross-listing.

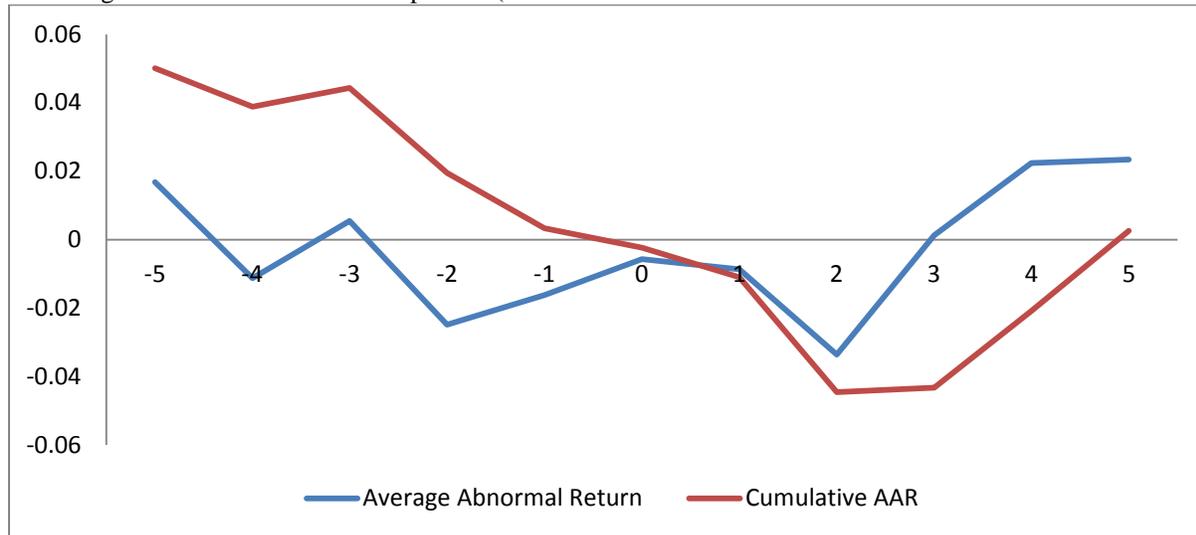


Figure 2:

Ecobank Transnational Incorporated

Ecobank Transnational Incorporation (ETI), a public limited liability company, was established as a bank holding company in 1985 under a private sector initiative spearheaded by the Federation of West African Chambers of Commerce and Industry with the support of ECOWAS. In the early 1980's the banking industry in West Africa was dominated by foreign and state-owned banks. There were hardly any commercial banks in West Africa owned and managed by the African private sector. ETI was founded with the objective of filling this vacuum. In October 1985, ETI was incorporated with an authorised capital of US\$100 million. The initial paid up capital of US\$32 million was raised from over 1,500 individuals and institutions from West African countries. The largest shareholder was the ECOWAS Fund for Cooperation, Compensation and Development (ECOWAS Fund), the development finance arm of ECOWAS. Today, Ecobank is the

leading pan-African bank with operations in 35 countries across the continent, more than any other bank in the world. It currently operates in countries in West, Central, East and Southern Africa. On 11th September, 2006, the shareholders of ETI endorsed the approval of listing the company's equity on Ghana Stock Exchange with an estimated capital of around \$867 million (9).

Abnormal returns around the date of cross-listings are positive and statistically insignificant. This shows that cross-listing does not increase firm value therefore we reject the null hypothesis that cross listing increase firm value. The returns at the event itself are insignificant but positive. For day -1 the average abnormal return is 0.2 percent (CAAR = 6.2 percent) with a z-statistic of 0.019. The average abnormal return for day 0 is 0.5 percent (CAAR = 6.7 percent) with a z-statistic of 0.055. For day +1 the average abnormal return is -4.1 percent (CAAR = 2.6 percent) with a z-statistic of -0.456. However, the market reacted positively to the announcement of cross-listing.

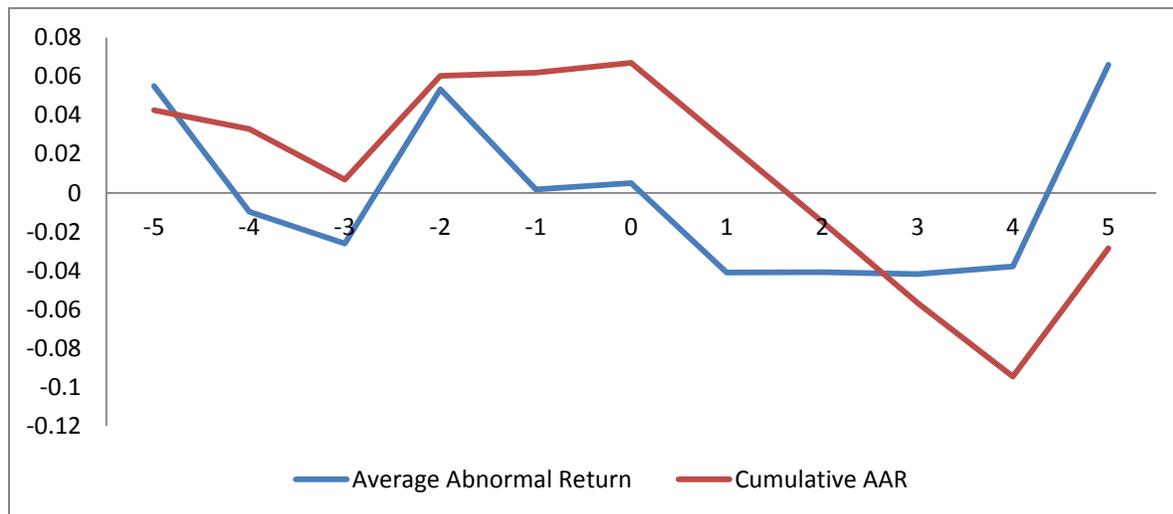


Figure 3:

Diamond Bank Plc

Diamond Bank Plc began as a private limited liability company on March 21, 1991 (the company was incorporated on December 20, 1990). Ten years later, in February 2001, it became a universal bank. In January 2005, following a highly successful Private Placement share offer which substantially raised the Bank's equity base, Diamond Bank became a public limited company. In May 2005, the Bank was listed on The Nigerian Stock Exchange. Today, Diamond Bank is one of the leading banks in Nigeria - respected for its excellent service delivery, driven by innovation and operating on the most advanced banking technology platform in the market. Diamond Bank has over the years leveraged on its underlying resilience to grow its asset base and to successfully retain its key business relationships. And like a diamond, our strength makes us even more valued and valuable (5). On 20th November, 2007, Diamond Bank Plc at the weekend announced its intention to conduct an offering of US\$500 million Global Depository Receipts (GDRs) listed on the

Professional Securities Market (PSM) of the London Stock Exchange (LSE). This represents the bank's ordinary shares listed on the Nigerian Stock Exchange (NSE). The bank states that though GDRs are typically issued to international investors to afford them the flexibility of investing in equities of markets other than their own, institutional investors are invited to participate significantly as US\$400 million out of the US\$500 million GDR offer by the bank has been set aside for indigenous investors (5).

Abnormal returns around the date of cross-listings are positive and statistically insignificant. This shows that cross-listing does not increase firm value therefore we reject the null hypothesis that cross listing increase firm value. The returns at the event itself are insignificant but positive. For day -1 the average abnormal return is -0.13 percent (CAAR = -0.46 percent) with a z-statistic of -0.664. The average abnormal return for day 0 is 2.99 percent (CAAR = 2.5 percent) with a z-statistic of 1.524. For day +1 the average abnormal return is -1.6 percent (CAAR = 0.89 percent) with a z-statistic of -0.831. However, the market reacted positively to the announcement of cross-listing.

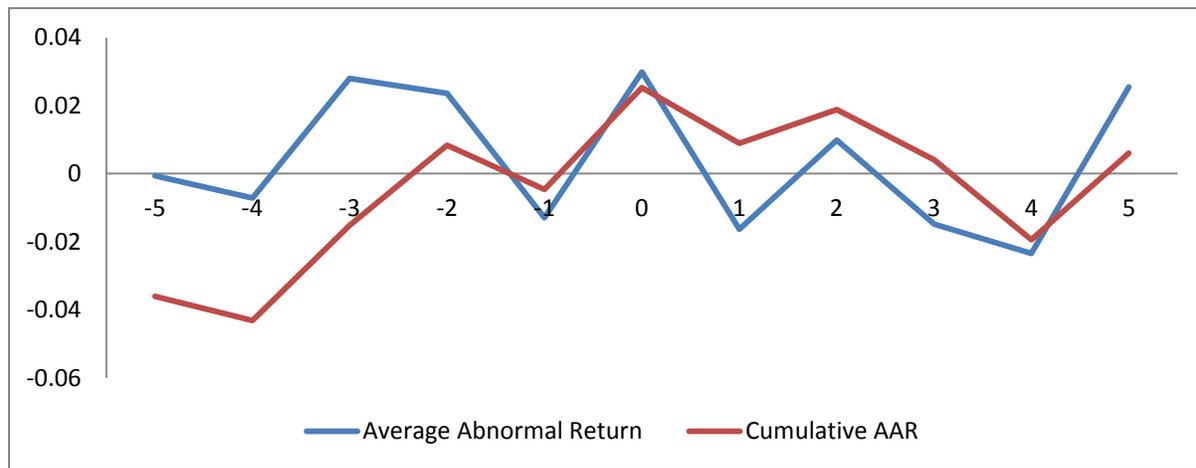


Figure 4:

Dangote Cement Nigeria Plc

Dangote Cement is West Africa's leading cement producer with 19 million tonnes of capacity at plants in Obajana, Ibese and Gboko. Manufacturing is supported by more than 3,000 trucks delivering bagged and bulk cement to more than 50 wholly-owned depots, as well as to hundreds of independent distributors. Dangote Cement's recently expanded plant at Obajana, in Kogi state, is the largest facility in Sub-Saharan Africa, with 10 mtpa capacity. The new Ibese factory, near Lagos, has 6 mtpa capacities while the Gboko facility in Benue is being upgraded from 3 mtpa to 4 mtpa capacity in 2012. Growth in production will be supported by a doubling of the Company's depot network to around 100. With a goal of becoming one of the world's leading cement companies by 2016, Dangote Cement has embarked on investing more than \$4 bn in new capacities, adding 9 million tonnes of production capacity in Nigeria and a further 18 million tonnes of production and import capacities across Africa (17). On 2nd

April, 2012, Africa's richest man Aliko Dangote, CEO and Chairman of Dangote Cement announced his plans to list his \$11 billion cement business, Dangote Cement, on the London Stock Exchange next year, the Financial Times reported in Monday. Dangote is cited by the FT as saying he intends to free-float a 20 percent stake in Dangote Cement to finance its rapid expansion (17).

Abnormal returns around the date of cross-listings are positive and statistically insignificant. This shows that cross-listing does not increase firm value therefore we reject the null hypothesis that cross listing increase firm value. The returns at the event itself are insignificant but positive. For day -1 the average abnormal return is -0.13 percent (CAAR = -4.7 percent) with a z-statistic of -0.008. The average abnormal return for day 0 is 1.42 percent (CAAR = -3.32 percent) with a z-statistic of 0.887. For day +1 the average abnormal return is 0.14 percent (CAAR = -3.45 percent) with a z-statistic of -0.085. However, the market reacted positively to the announcement of cross-listing.

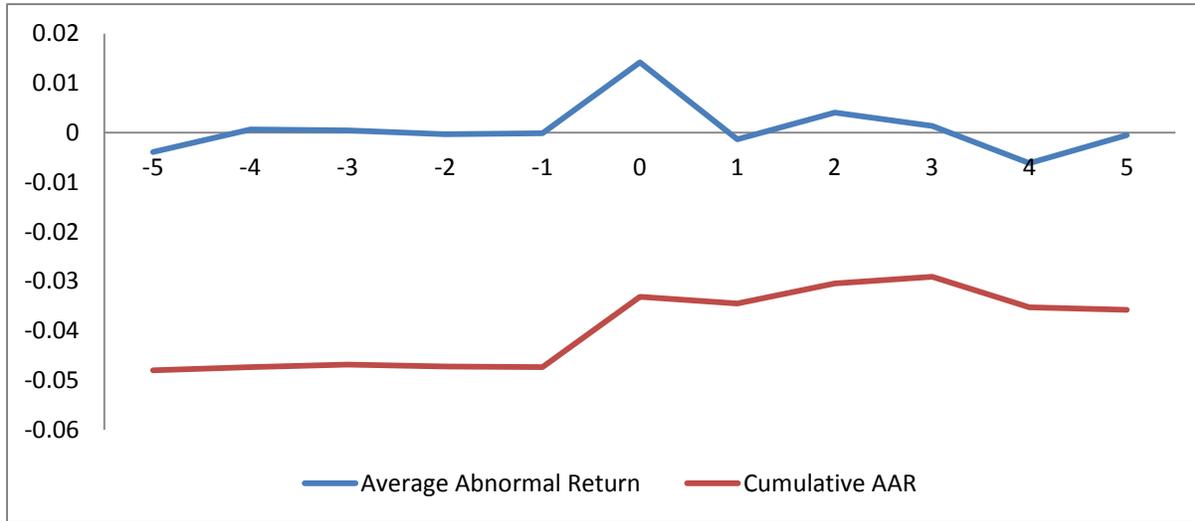


Figure 5:

Oando Plc

Oando Marketing, is a fully owned subsidiary of Oando and Nigeria’s leading supplier and distributor of refined petroleum products. Distributing over 2 billion litres of products annually and with a market share of 18%, 22%, and 15% in refined products, lubricants, and LPG respectively, OMP has successfully become the leading consumer brand in the downstream sector in the last five years. As the nation’s leading oil retailer through our network of strategically located retail service stations and terminals, we have continuously ensured products supply and availability in Nigeria and West Africa. Oando Marketing currently has subsidiaries in Ghana, Togo, and Burkina Faso. Oando Marketing offers a wide range of products including Premium Motor Spirit (PMS), Automotive Gas Oil (AGO also known as Diesel), Dual Purpose Kerosene (DPK), Aviation Turbine Kerosene(ATK), Low Pour Fuel Oil (LPFO), Lubricating Oils and Greases,

Insecticides, Bitumen, Liquefied Petroleum Gas (LPG, also known as Cooking gas) and Oando insecticide (15).

On 25th November, 2005, Oando Plc announced its intention to a cross-border inward listing on the Johannesburg Stock Exchange (JSE), the first African company to accomplish that (15).

Abnormal returns around the date of cross-listings are positive and statistically insignificant. This shows that cross-listing does not increase firm value therefore we reject the null hypothesis that cross listing increase firm value. The returns at the event itself are insignificant but positive. For day -1 the average abnormal return is 1.2 percent (CAAR = -3.8 percent) with a z-statistic of 0.5109. The average abnormal return for day 0 is -3.8 percent (CAAR = 1.3 percent) with a z-statistic of -1.5961. For day +1 the average abnormal return is 0.9 percent (CAAR = 2.3 percent) with a z-statistic of 0.4248. The market reacted negatively to the announcement of cross-listing.

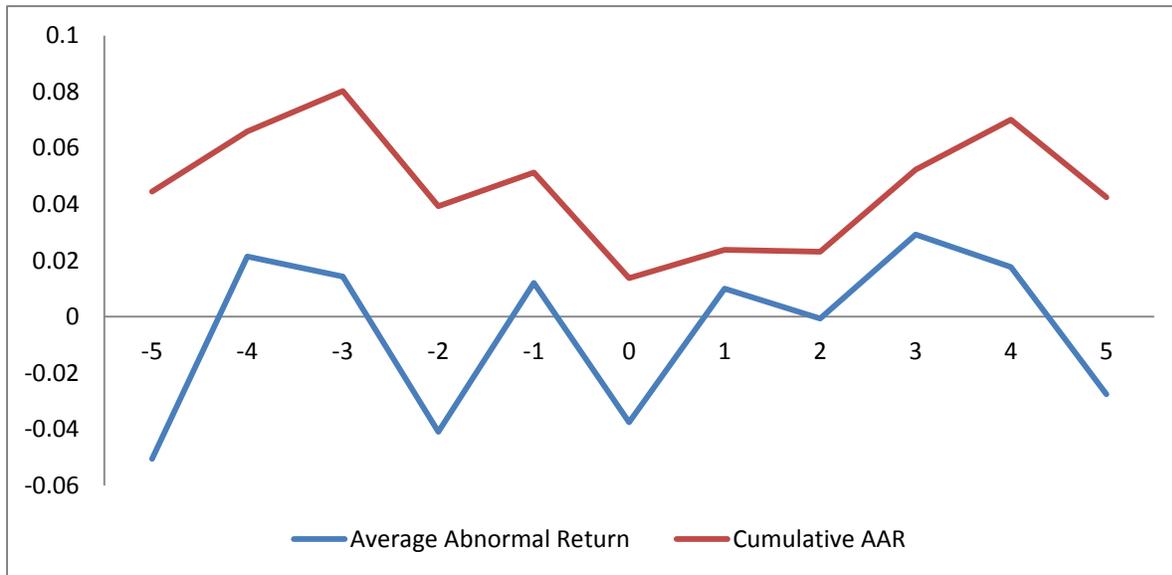


Figure 6:

4.7 Integrated analysis of the six companies around the event window

To test for the robustness of the results, figure 6 and 7 presents the results of the event study of the market reaction to the cross-listing of stocks by firms.

Cumulative abnormal returns for 75 days around the date of cross-listings are negative at an average of -0.12 percent and not statistically significant for all the stocks analyzed. This underscores the fact that cross-listing does not increase firm value but the market reacted positively to the announcement dates.

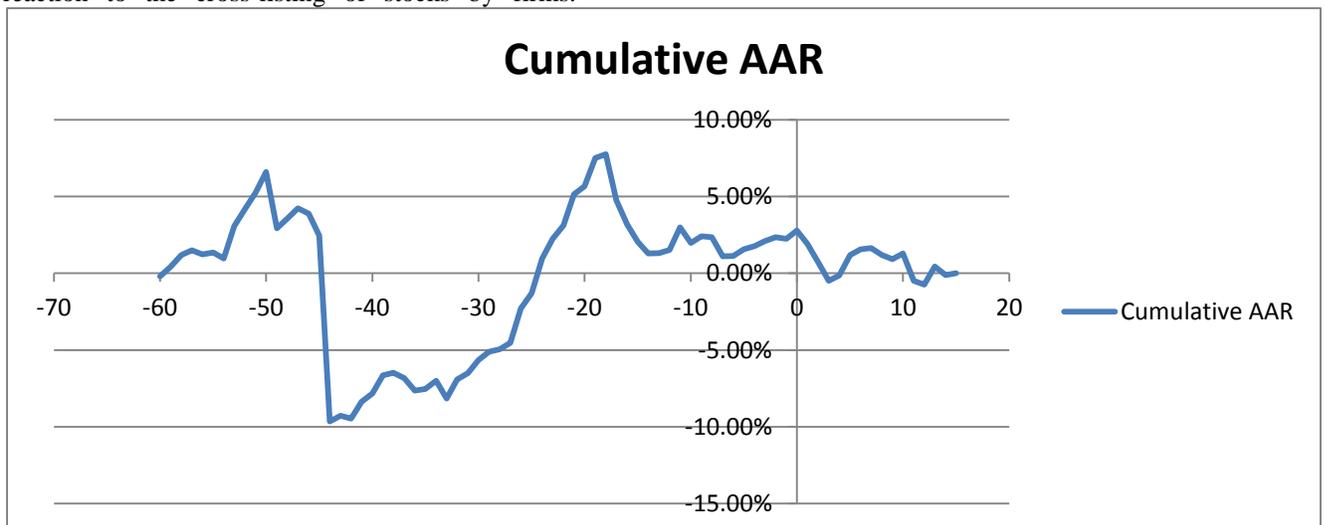


Figure 7:

Abnormal returns around the date of cross-listings are positive and statistically insignificant. This shows that cross-listing does not increase firm value therefore we reject the null hypothesis that cross listing increase firm value. The returns at the event

itself are insignificant but positive. For day -1 the average abnormal return is -0.12 percent (CAAR = 2.2 percent) with a z-statistic of -0.067. The average abnormal return for day 0 is 0.55 percent (CAAR = 2.7 percent) with a z-statistic of 0.312. For day +1 the average abnormal return is -0.86 percent (CAAR =

1.9 percent) with a z-statistic of -0.495. The market reacted positively to the announcement of cross-

listing.

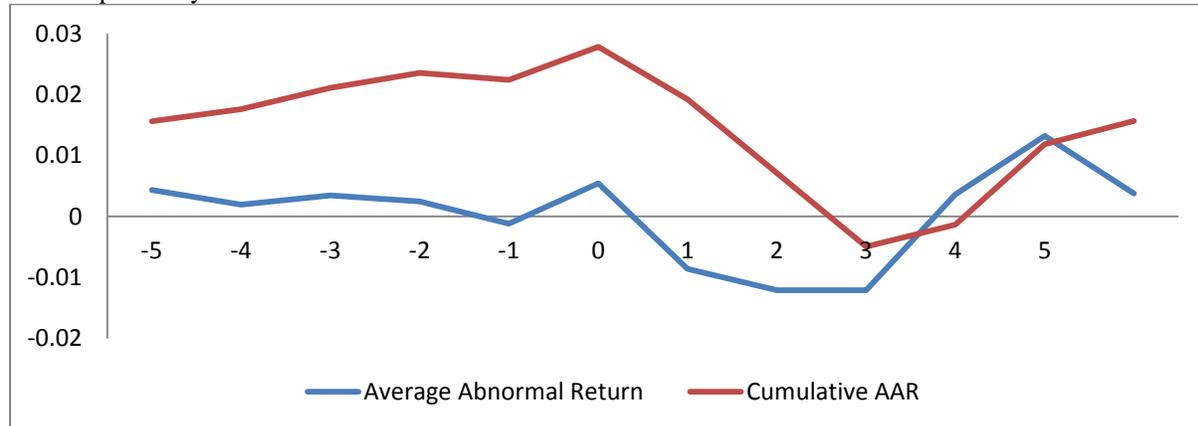


Figure 8:

CONCLUSION

The study presents evidence on the stock price impact of cross-listing. Although returns varied among firms in the sample, they are higher around cross-listings are considered to be positive but relatively low. The positive announcement period effect, together with the normal post cross-listing performance, shows that cross-listing do not increase firm value but however the market reacted positively to the announcement of cross-listing which may increase the firm value in a long run. This study has found that firms benefit from the cross-listing of shares outside their home market. To foster an increase in cross-listings, appropriate and complementary action is required by both firms and policy makers. For firms to pursue cross-listings that are market driven, they need to improve on corporate governance, minimize information asymmetry, increase their net worth and harmonize their accounting and reporting format with international guidelines. The firm also need to promote the benefit to cross-list to the domestic shareholders so as to let them inform and be aware of what cross-listing is all about due to the lack of access to information and literacy level.

Given the importance of stock market development for economic growth, policy makers need to give due consideration to taking the necessary steps to further integrate the stock markets. Policy makers of both the countries of primary and secondary listings need the right policy handles to conceptualize, facilitate and

steer cross-listing efforts by firms. Through complementary policy based efforts, policy makers can set the stage for cross-listings and harness the numerous related benefits.

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