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IS THERE A POST LISTING ANOMALY FOR IPOS OVERSEAS LISTING?

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ABSTRACT

Both the IPO literature and cross listing literature document that soon after the overseas listing of IPOs, the results are negative abnormal returns, and that phenomenon are " post listing anomaly". This paper checks whether there is a post listing anomaly and tries to find reasons for it. The paper concludes that the post listing anomaly does not exist. Further, some companies time the market while others do not when they consider listing their IPOs overseas.

Keywords: IPO, Cross listing, Market efficiency, Abnormal returns

INTRODUCTION

One of the most significant anomalies in the financial markets is that stock prices seem to rise just before listing, but they drop after listing and continue to decline for some companies some time. Companies' cite reasons for cross-listing on several criterions such as an expansion of their prestige, stock visibility, the effect of signaling, and the development of liquidity and managers preferences.The study tries to answer is there a post listing anomaly? The study approaches this question through the relationship between cross-listing decisions and post listing returns. This paper aims to expand the realm of cross-listing and IPO (initial public offerings) studies by including a broader perspective that allows for analyzing the motives of cross-listing decisions in the IPO case. The study uses an event study that includes 89 companies from 15 different countries. The study begins with a review of the literature concerning cross-listing, and the topics examined in terms of the reasons to cross-list, and attempts to explain the short term anomaly of negative post listing abnormal returns through the lens cross-listing and using IPO firms. My methodology involved examining the relationship between post listing abnormal returns and the initial IPO cross-listing decision. In the cross-listing literature, the main theme that emerged is most companies achieve significant negative abnormal returns after they cross-list, referred to in the literature as the post listing anomaly. In the IPO literature, the main argument that most companies' achieve significant positive abnormal returns on the first day of the IPO and long run negative abnormal returns. One could stay there, but then that raises another question, why does such an

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anomalies exist, if they certainly do. Instead, if the study wants to answer the combined questions of why IPO companies' cross-list and why there is a "post listing anomaly" then a connection between those two questions can be explored.To get an answer, the study developed a common factor between those two questions, which is "the host market condition". The study uses the market index return for the S&P 500 because it gauges the health of the market condition, and used Portfolio Matching (PM) because the latest research recommended the use of PM index in analyzing IPOs. The study developed 4 hypotheses to assess whether there is a post listing anomaly or whether there are some companies that time the market.The study uses a wide range of parametric and non parametric tests to evaluate each of the hypotheses, and the motivation to do so is the distribution properties of the daily stock returns, as they do not follow the normal distribution characteristics. The study uses the Fama-French approach to investigate the possibility of whether the market model is the best one to use to calculate the abnormal returns.

This study found that there is neither a post listing anomaly nor there is an IPO anomaly. The abnormal returns after post listing and IPO can be explained through the host market conditions and linked to a conclusion about market timing decisions by managers.This paper proposes it proposes an attempt to explore the motives of cross-listing companies and explain the "IPO anomaly". Second, the study goes beyond documenting abnormal returns behavior and relates that behavior to market timing decisions by managers.

LITERATURES REVIEW

Companies have different motives to launch their IPO in different countries through the process of cross-listing. According to Merton (1987), the market value of companies share will go up with an increase of investor's base and that explains someone's desire to list overseas. Pagano *et al.* (2002) and Leuz *et al.* (2006) find that companies listing abroad to have better access to foreign markets.Karolyi's (2006), model describes another channel through which a cross-listing could affect a company value, which he called the information channel. This result is notable as some researchers document such a premium for companies cross-listed in the United States (e.g. Doidge *et al.*, 2004; King and Segal, 2006). They also show that the cross-listing premium persists when they control for the size of growth opportunities.While the main benefits of the US listing stem from the ability of the non US firms to access the US common equity markets, such gains tend to be economically significant in the short run, and dissipate in the long run. Sarkissian and Schill, (2008) report that overseas listing offer temporary value gains. Karolyi, (2006); King,(2007) document other theories that explain reasons for overseas listing such as the bonding hypothesis, investor recognition, and market segmentation. Empirically it has been difficult to distinguish among different theories.

Miller, (1999) documents equity capital raised in the US tend to have higher abnormal returns surrounding the US listing announcements, and conclude that the evidence is consistent with

market segmentation. Coffee (2002), however, argues that this evidence supports the bonding hypothesis because emerging markets have weaker investor protection, and firms from such markets get more credibility by submitting to the US legal system. Foerster and Karolyi, (1999) provide evidence consistent with managers' strategic market timing to utilize better market valuations, and investor awareness. Merjos, (1963, 1967) investigated the price behavior of newly listed stocks three months before listing and one month after listing. She found that the sample outperformed the market in the three month period before listing, but underperformed the market during one month period after listing. Reints and Vandenberg, (1975) argued "in an efficient capital market", the act of listing should not affect a company's systematic risk level, and their study employing the Chow test found no significant change in the stock's systematic risk after listing. Subsequently, Fabozzi and Hershkoff (1979) confirmed those results. Ying *et al.* (1977) employed the Fama-MacBeth procedure and found a significant increase in pre-listing price, with, however, only a modest reduction in post listing. Sanger and McConnell, (1987) documented that stocks, on average, earn positive abnormal returns before listing and negative abnormal returns over the four-to-six-week period immediately following listing.

Hwang and Jayaraman, (1993) investigated whether the negative post listing anomaly is a global phenomenon and whether the differences in the market-making components explain the anomaly. Although the abnormal returns for the entire sample were significantly positive, because of the IPOs. The post listing returns form for the non IPO companies was negative.Dharan and Ikenberry, (1995) hypothesized that executive's time the market and documented significant negative abnormal returns for up to 36 months after listing. One intriguing question then to consider is whether there is some reasonable path dependence in the cross-listings process across companies and over time. One could argue that these cross-listings may come to symbolize more of a corporate decision.Market segmentation hypothesis argues that the major benefits for US listing arise from mitigating the effects of investments barriers, such as differences in the accounting information and disclosures across countries, which segment capital markets across national boundaries. Stapleton and Subrahmanyam, (1977); Errunza and Losq, (1985); Alexander *et al.* (1987) the goal of companies who list overseas is to reduce their cost of capital. Merton's (1987) developed the investor recognition hypothesis, which assumes that investors invest only in firms they know about, and imply that the expected rate of return on a stock has a negative correlation with the size of the company's investor base. According to this hypothesis, a US listing enhances firm value because it increases firm visibility and name recognition, which in turn potentially increases the listing firm's shareholder base relative to its domestic listed peers.Several studies report a higher analyst following for non US firms that raise equity in the US. Baker *et al.* (2002) document that listing in US has more analyst reports and more business media attention. Forester and Karolyi, (1999) document that those firms raising equity simultaneously with a cross-listing have a more favorable price impact in the short run and a less severe decline in the post listing period, compared to their non capital raising peers. Thus, the investor recognition hypothesis predicts a higher post listing performance.

The bonding hypothesis argues that the benefits of cross-listing on the US stock exchanges stem from enhanced investor protection and the reduced agency costs of controlling shareholders because the firm bonds itself to the enforcement powers of the US SEC and the US Federal securities laws (Coffee, 1999, 2002; Stulz, 1999). Doidge *et al.* (2004) argue that non US firms follow the US legal system via listing "on stock exchanges" to support their growth opportunities. The theory predicts higher valuation effects for firms from countries with poor quality of investor protection (Doidge *et al.*, 2004). The window-of-opportunity hypothesis assumes asymmetric information between investors and managers select the timing of exchange listing to take advantage of temporarily favorable market conditions. According to (Dharan, 1995; Alexander *et al.*, 1987; Forester and Karolyi, 1999; Mittoo, 2003) there are pre-listing prices run up and that results in positive abnormal returns that quickly change to negative abnormal returns after listing. Extant evidence shows that IPOs occur in waves, and tend to cluster during booming industry and market valuations. Accordingly, the hypothesis predicts a clustering, and a more negative performance for the IPOs listed during the Internet bubble period (during 1999–2000).The business strategy hypothesis suggests that the US listing decision is a part of the company's business strategy, which could include business or financing considerations or both. Pagano *et al.* (2002) suggest that a US listing has several advantages such as advances in the firm's competitive position and reputation. Fanto and Karmel, (1997) report that executives of foreign firms consider their US business as a significant driving factor while Bancel and Mittoo, (2001) find that about 16% of European managers surveyed cite the easier implementation of global business strategy as an important factor in their US listing decision.

It is suggested by Chemmanur, (1999); Maksimovic, (2001) that going public is a way to raise capital to support its growth opportunities. Krigman *et al.* (1999); McDonald (1972); Loughran and Ritter (2004) document that IPOs produce positive abnormal performances on or around the listing period and then become negative after that.The investing public may cause abnormal performance because they are acting irrationally when attempting to evaluate IPOs. Garfinkle *et al.* (2002) report that this irrational view may occur because the investors know about the historical pricing anomaly (short term abnormally positive performance) and in turn demand for IPOs is abnormally high, which pushes up the prices. Schultz (2003) illustrates how the number of IPOs issued increases as the market peaks this pseudo-timing incident illustrates how IPOs become overpriced in the aftermarket.

HYPOTHESIS DEVELOPMENT

This study aims to answer why companies cross-list in terms of the post listing abnormal returns; the research first examines whether the "post listing IPO anomaly" exists.

H_0: Post listing anomaly exists

H_A: Post listing anomaly does not exist

It is necessary to consider when the article mention anomaly, the study refer to the fact that post listing CAAR (Cumulative average abnormal return) is a negative, which confirms the prevailing idea of the anomaly. However if, after the IPO listing overseas there is a positive CAAR then there is no anomaly.Then the paper moved to the second set of hypotheses as such:

$H1_A$: Some companies time the market
$H1_B$: Some companies do not time the market

The second set of hypotheses continues from the same perspective, but in this case, the focus on the relationship between host market condition, the CAAR, and managerial decisions. Two cases come under this set of hypotheses. The first case is where the host market environment is positive, yet the CAAR is negative. The second case where the host market condition is negative, yet CAAR are positive. In the first case, I hypothesize that those companies who list in favorable market conditions time the market and market participants know that or else why they realize negative abnormal returns. In the second case, I hypothesize that those who list in unfavorable market conditions do not time the market, and market participants can recognize the true value for the company such that the companies' achieve positive post listing abnormal returns despite unfavorable host market condition. This article did not address how market participants recognized the true value of the company because that is not the domain of this paper. That question is for more research in future studies.

RESEARCH METHODOLOGY

Daily returns

This study uses the event study methodology, because of the vast number of research projects that have applied the methodology, the event study methodology is the preferred method employed by researchers attempting to examine questions related to market efficiency. The event study methodology is the historically accepted method used when attempting analyzing a IPOs performance from both short- and long-term event windows (see Bradley *et al.*, 2003; Ibbotson, 1975; Ritter, 1992). Fama, (1976) documents that daily returns are not normally distributed. Brown and Warner, (1985) indicate that this also the case for excess returns based on daily data. However, this point need not necessarily bias the hypothesis test toward type I error. (Brown and Warner, 1980, 1985) provide evidence that the *t*-test is an accurate test for the presence of abnormal performance, despite the non normality of the distribution of daily residuals. Sanger and Peterson, (1990) report that tests using daily returns are more powerful than those using monthly returns, and the non normality of stock returns has little effect upon properties of test statistics. Implicit in the *t*-tests that evaluate the abnormal returns a number of strong assumptions that could be violated. Hence, the paper used non parametric tests that require less restrictive assumptions than the *t*-test;

these include: the *sign test* and the *Wilcoxon signed rank test* (Kaplan and Roll, 1972; Collins, 1979). The study explored the basic statistical measures for variableR_t. Table 1 report that the average daily stock returns for my sample is - 0.00021, with a standard deviation of 0.05616. Next, the study examined the significance of the variableR_t,with a *p*-value of <0.0001, which shows that the average daily stock returns is significantly different from zero. The study also examined the goodness-of-fit daily returns against normal distribution based on Kolmogorov–Smirnov (D = 0.1478) with a *p*-value of (0.01), and the study reject the null hypothesis and conclude that daily returns are not normally distributed. The Cramer–von Mises and Anderson–Darling tests also result in a p-value less than 0.05, which confirms the conclusion that the data are not normally distributed. Table 1 reports that the average daily stock returns for the sample is - 0.00021, with a standard deviation of 0.056.

Table 1: Basic Statistic

Basic Statistical Measures			
Location		Variability	
Mean	-0.00021	Std Deviation	0.05616
Median	0.00000	Variance	0.00315
Mode	0.00000	Range	4.53852
		Inter-quartile Range	0.03367

Table 2: Tests for location

Tests for Location: Mu0=0				
Test	Statistic		P-Value	
Student's t	T	-1.0722	Pr> |t|	0.2836
Sign	M	-813	Pr>= |M|	<.0001
Signed Rank	S	-1.771E7	Pr>= |S|	0.0048

Table 3: Goodness of fit test

Goodness-of-Fit Tests for Normal Distribution				
Test	Statistic		P-Value	
Kolmogorov-Smirnov	D	0.14783	Pr> D	<0.010
Cramer-von Mises	W-Sq	919.86252	Pr> W-Sq	<0.005
Anderson-Darling	A-Sq	4999.90443	Pr> A-Sq	<0.005

Table 2 examines the significance of the variableR_t,*p*-value of <0.0001, and shows that the average daily stock returns is significantly different from zero. Table 3 shows Kolmogorov-Smirnov is significant with a p-value <0.0001 such that the daily returns are not normally distributed. The Cramer–von Mises and Anderson–Darling tests also result in a p-value < 0.0005, which confirms the conclusion that the daily return data are not normally distributed.

Abnormal returns estimation

The next step is to calculate abnormal return, but before abnormal returns can be measured, a benchmark used to define normal returns must be specified. In theory, the correct identification of the "true" return generating process is essential in event studies.There are 5 standard models the

study considered: Mean Adjusted Returns, Market Adjusted Returns, Control Portfolios or PM, Risk Adjusted Returns and Fama-French model. Brown and Warner (1980, 1985) find that the average adjusted returns measure often works and provide the same results as complex models do. In a more detailed comparison, Dyckman *et al.* (1984) find that the risk adjusted process is better. This paper uses risk adjusted expected return generating model, but to tackle the problem of non synchronous trading, the literature suggested two methods. These methods are the Scholes and Williams (1977) beta (SW) and the Dimson (1979) beta. Fowler and Rorke, (1983) demonstrate the effectiveness of these two methods to be relatively equivalent. According to Reinganum (1982), and Theobald (1983) when SW beta or Dimson beta compared to the standard Ordinary Least Squares (OLS) method, the SW and Dimson betas produce no more powerful results than the OLS beta.Moreover, Bartholdy and Riding (1994) conclude that OLS outperforms these two methods of beta calculation, thus attenuating the case that methods beyond the traditional OLS method should be used. Abnormal returns are the actual ex post return of security over the event window minus the normal return of the company over the event period. The normal return is the return that would be expected if the event did not take place. For each company i and event dateτ:

$$\epsilon_{it}^{*} = R_{it} - E\{R_{it}|H_t\} \qquad (1)$$

Where $\epsilon_{it}^{*}, R_{it},$ and $E(R_{it})$ are the abnormal, actual, and normal returns, respectively, for period $t. H_t$ represents the conditioning information for the model. IPOs lack estimation period that give the researcher with a model of normalized returns, so in many ways IPOs event studies differ from the standard event study (Campbell *et al.*, 1997). Initially, researchers compared IPO returns to standard benchmarks (e.g. Russell 3000 Index, or S&P 500), but this was ineffective when they attempted to analyze IPO performance because IPOs lack the past performance. So to create an accurate benchmark, without using historical data, researchers have constructed portfolios or matched the event firm to a non event company because they are more accurate than simply matching the event firm to a standard market index, and reducing the beta coefficient. Several researchers used different methods as such Brav (1997) and Carter (1998) used the PM approach while Bhabra (2003) and Perfect (1997) used the MF approach, while, Ritter (1991) used both the MF and PM approach.This study used two strategies: (a) The S&P500 index to follow the practice of using the market index in event study methodology; (b) the PM method which uses external portfolios to match the firms to similar portfolios with similar likeness. For each month, the study calculates average abnormal returns (AAR) and cumulative average abnormal returns (CAAR) using the standard event study methodology and exclude firms that have missing data either on prices or dividends.

The research conducted several checks to verify the IPO status of a firm. First the study ensures that the IPO firm has no trading history in DataStream prior to US listing date on any stock exchange. Firms with the stock returns data prior to the listing period are not in the sample. Second, the study also examines other data sources, including Edgar electronic filings, Bloomberg, and

individual company websites to confirm the IPO status.The host market condition is a feature that will allow the study to assess the hypotheses. The study defines the host market condition proxy, $\overline{S\&P_{500}}_{(0,+50)}$, as the average $S\&P_{500}$ index return for the post listing period of (0 to +50) days or $PM_{(0,+50)}$. The study chose this average index return as an indicator of the host market environment as either a positive or a negative. Since the article is using the market model to estimate the normal return and used the daily index returns as the proxy for the market portfolio, then by definition the estimated normal return will reflect those host market conditions. In doing so, the estimated abnormal return should also reflect those host market conditions.As described earlier the paper used the OLS method to determine the market model[2] parameters using the either $S\&P_{500}$ daily index returns or (PM) $PM_{(0,+50)}$as a proxy for the market portfolio returns. The study considered the aggregation of CAAR to follow the guidance of Dyckman *et al.* (1984). The aggregation is along two dimensions—over time and across securities. The study considered aggregation over time for a single security and then considered aggregation both across securities and over time.

Data

The study conducted the research from 2002 to 2008. The study chose this time to perform analysis on the most recent data available. The study uses companies who chose the U.S market for their IPO. There are 89 firms and 15 different countries in the sample. Table 4 shows the list of countries used in the sample, their daily average return, and the corresponding host market index return ($S\&P_{500}$). The table also shows that the sample has 2,340 observations with a 0.0041 average daily return for the IPO companies that listed in the US market. The study conducted the research from 2002 to 2008. The study uses companies who chose the U.S market for their IPO. There are 89 firms and 15 different countries in the sample. Table 4 shows the list of countries used in the sample, their daily average return, and the corresponding host market index return ($S\&P_{500}$). The table also shows that the sample has 2,340 observations with a 0.0041 average daily return for the IPO companies that listed in the US market.

Table 4: Descriptive statistics

	Daily Domestic Return			Host Market Index Return		
	Mean	StdDev	# Obs	Mean	StdDev	# Obs
Country London	.00016	.01824	30	.30233	.95781	30
Bermuda	.00064	.03296	180	.09242	.78735	198
Canada	.00354	.03269	60	-.0440	1.0345	60
India	.01065	.04430	30	-.0717	.38237	30
Mexico	.00403	.04258	90	.21283	1.0388	120
Israel	.00337	.04631	180	-.0418	.74243	180
KOREA	-.0025	.02392	60	.08900	.49604	60
TAIWAN	.00026	.03203	60	.06000	.44788	60
China	.00719	.12402	1,140	.08559	.74199	1,200

[2] See appendix A.1 for a complete description of the econometrics of estimating the market model using OLS.

	Daily Domestic Return			Host Market Index Return		
	Mean	StdDev	# Obs	Mean	StdDev	# Obs
Netherland	.00781	.03467	60	-.0353	.52551	60
Brazil	-.0014	.01522	60	-.0393	.52491	60
Greece	-.0031	.02561	300	.11380	.73073	300
Argentina	.00797	.03603	30	-.0363	.53614	30
SPAIN	.01065	.03637	30	-.0373	.63610	30
COLOMBIA	-.0104	.06506	30	.34733	1.6781	30
Total	.00401	.09015	2,340	.08191	.78805	2,508

Statistical tests

The literature refers to the Patell test as the standardized abnormal return measure or a test assuming cross-sectional independence. Many published studies use the Patell test (Linn and McConnell, 1983; Schipper and Smith, 1986; Haw *et al.*, 1990). Since, there is serial dependence in the CAAR, so I used Mikkelson and Partch (1988) adjustment to get the test statistic. The corrected test accounts for the serial correlation of CAAR in the test window. I used the corrected test to follow other researchers like Mais *et al.* (1989), Cowan *et al.* (1990), Mann and Sicherman (1991) who used the same procedure. Events are endogenous, reflecting a company's self-selection in choosing the event, which in turn reflects insider information. In acknowledging these factors, it can be observed that the unexpected information provided by an event determines stock price effects. Therefore, standard estimates of cross-sectional coefficients can be biased (Eckbo *et al.* (1990). For such a situation, Sefcik and Thompson (1986) assess the statistical properties of cross-sectional regressions. They argue that accounting for cross-sectional correlated CAAR and heteroscedasticity in the abnormal returns is potentially crucial for inferences. Boehmer *et al.* (1991) introduce the standardized cross-section test and report its observed properties. The test is the same as the Patell test except that there is an empirical cross-sectional variance adjustment in place of the analytical variance of the total standardized prediction error (Sanders and Robins, 1991). Brown and Warner (1985) report that the cross-sectional test is well-specified for event date variance, but not particularly convincing; however, Boehmer *et al.* (1991) report that the standardized cross-sectional test is more powerful and equally well-specified. The study used the transformed normal test to correct for skewness Hall (1992).

The paper used non parametric tests to avoid the misspecification errors that occur when using parametric tests. The sign test is a non parametric test, and its weakness is that it may not be well-specified if the distribution of CAAR is skewed as can be the case with daily data. With skewed CAAR, the expected percentage of positive cumulative CAAR can differ from one-half even under the null hypothesis. Frank Wilcoxon (1892–1965) designed the Wilcoxon test to improve on the sign test. Another test the article uses is the generalized Z test. For each window, the study reports the number of securities with positive and negative CAAR, the null hypothesis for the generalized sign test is that the ratio of positive returns is the same as the ratio of positive returns in the estimation period.Corrado, (1989) describes the rank test for a one-day event window. The ranks of the CAAR of different days are dependent by construction. However, the result of ignoring the

dependence should be trivial for short-event windows. The rank test extends to multiple-day windows by assuming that the daily return ranks within the window are independent. The rank test procedure treats the combined estimation period and event period as a single set of returns and assigns a rank to each day.

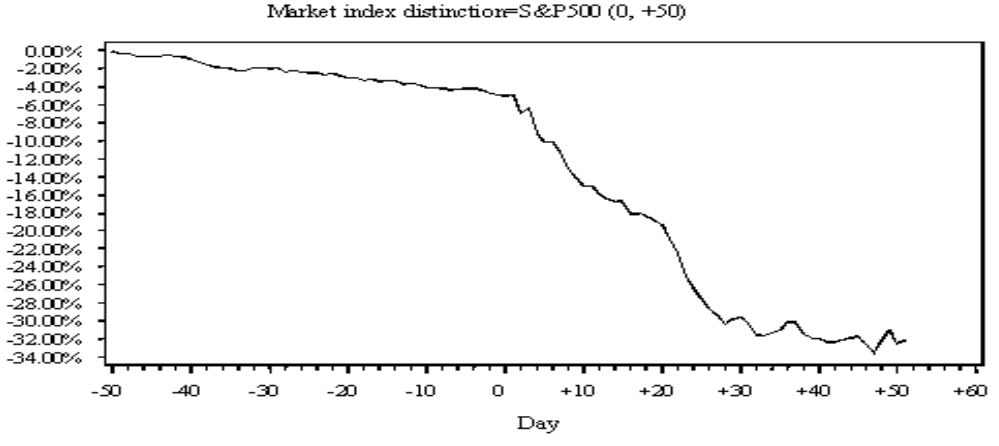
Empirical results

Table 5 shows the results of testing in which the post listing anomaly exists, that is, there are significant negative post listing CAAR. The study reports that in the days of (11, +50) post listing period, the average cumulative abnormal return is–15.94%, and is significant at 0.1% level, for Patel test, a time-series cross-sectional test (hereafter, TCS), signed rank test, a skewness corrected *t*-test (hereafter, SCT), and some other parametric and non parametric tests. Based on those results, the study concludes that the post listing anomaly exists for some companies which supports hypothesis **H_0:** Post listing anomaly exists. Table 5shows the results of testing in which the post listing anomaly exists, that is, there are significant negative post listing CAAR. The study reports that in the days of (11, +50) post listing period, the average cumulative abnormal return is–15.94%, and is significant at 0.1% level, for Patel test, a time-series cross-sectional test (hereafter, TCS), signed rank test, a skewness corrected *t*-test (hereafter, SCT), and some other parametric and non parametric tests. Based on those results, the study concludes that the post listing anomaly exists for some companies which supports hypothesis **H_0:** Post listing anomaly exists. Figure-1 depicts how CAAR behave during the window of (–50, +50) when using the ($S\&P_{500}$) market index benchmark. Figure-1 shows a negative post listing CAAR over the window of (11, +50), which confirms the hypothesis that the post listing anomaly does exist. Figure-1 depicts how CAAR behave during the window of (–50, +50) when using the ($S\&P_{500}$) market index benchmark. Figure 1 shows a negative post listing CAAR over the window of (11, +50), which confirms the hypothesis that the post listing anomaly does exist. Table 6 shows the results of testing in which the post listing anomaly does not exist, that is, there are significant positive post listing CAAR. The study reports that in the days of (11, +50) "the post listing period", the CAAR is 10.84% and is significant at 0.1% level, for Patel test, TCS, signed rank test, a SCT, and a *Z* -standardized cross-sectional test (hereafter, ZSTD). Based on those results, the study concludes that the post listing anomaly does not exist for some companies, which casts doubt on the validity of the anomaly, because some companies do not show such an anomaly, which supports hypothesis **H_A:** Post listing anomaly does not exist.

Table 5: Market model

Market Model, S&P500(0,+50)									
Days	N +:-	Mean Cumulative Abnormal Return /PWCAAR /Median	Patell Z	Std Csect Z	CSectErr t	Generalized Sign Z	Rank Test Z	Signed Rank	Skewness Corrected T1
(-1,+1)	34 16:18	-0.14% 0.38% -0.45%	1.243 (0.107)	0.122 (0.451)	-0.078 (0.469)	-0.800 (0.212)	-1.291 (0.099)	-30.500 (0.305)	-0.078 (0.469)
(-3,+3)	34 11:23<<	-1.95% -1.33% -1.97%	-5.078 (<.001)	-0.715 (0.237)	-1.000 (0.159)	-2.521 (0.006)	-3.169 (<.001)	-111.50 (0.028)	-0.915 (0.180)
(+1,+20)	34 2:32<<<	-13.57% -13.76% -11.80%	-27.561 (<.001)	-6.022 (<.001)	-5.446 (<.001)	-5.617 (<.001)	-8.007 (<.001)	-270.50 (<.001)	-8.310 (<.001)
(0,+50)	34 5:29<<<	-25.45% -27.02% -23.09%	-32.542 (<.001)	-5.745 (<.001)	-5.287 (<.001)	-4.585 (<.001)	-8.879 (<.001)	-249.50 (<.001)	-7.076 (<.001)
(+11,+50)	34 9:25<<<	-15.94% -18.16% -13.56%	-25.007 (<.001)	-3.497 (<.001)	-3.324 (<.001)	-3.209 (<.001)	-6.165 (<.001)	-175.50 (<.001)	-3.196 (<.001)

P-values are in parentheses. The symbols (,<,<<,<<< or),>,>>,>>> show the direction and generic one-tail significance of the generalized sign test at the 0.10, 0.05, 0.01 and 0.001 levels, respectively.



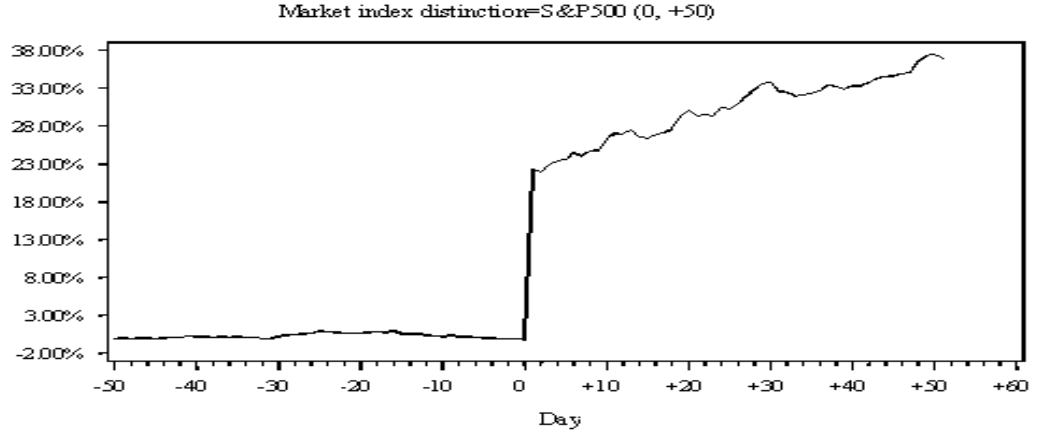
Figue 1: Market index

Table 6 shows the results of testing in which the post listing anomaly does not exist, that is, there are significant positive post listing CAAR. The paper reports "in the days of (11, +50) post listing period", the average cumulative abnormal return is 10.84% and is significant at 0.1% level, for Patel test, TCS, signed rank test, a SCT, and a *Z* -standardized cross-sectional test (hereafter, ZSTD). Based on those results, the study concludes that the post listing anomaly does not exist for some companies, which casts doubt on the validity of the anomaly because some companies do not show such an anomaly, which supports hypothesis **H_A:**Post listing anomaly does not exist. **Figure-2** depicts how CAAR behave during the window of (–50, +50) when using the ($S\&P_{500}$) market index benchmark. Figure 2 shows a positive post listing CAAR over the window of (11, +50), which confirms the hypothesis that the post listing anomaly does not exist.

Table 6: Market model

Market Model, S&P500(0,+50)									
Days	N +:-	Mean Cumulative Abnormal Return /PWCAAR /Median	Patell Z	StdCsect Z	CSectErr t	Generalized Sign Z	Rank Test Z	Signed Rank	Skewness Corrected Tl
(-1,+1)	43 33:10>>>	22.33 23.06% 12.57%	142.222 (<.001)	2.869 (0.002)	2.700 (0.003)	3.122 (<.001)	2.916 (0.002)	377.000 (<.001)	5.390 (<.001)
(-3,+3)	43 35:8>>>	22.87 23.24% 15.03%	94.740 (<.001)	3.103 (<.001)	2.916 (0.002)	3.733 (<.001)	1.171 (0.121)	398.000 (<.001)	5.914 (<.001)
(+1,+20)	43 35:8>>>	29.96% 30.22% 18.04%	71.791 (<.001)	4.000 (<.001)	3.855 (<.001)	3.733 (<.001)	0.836 (0.202)	413.000 (<.001)	7.973 (<.001)
(0,+50)	43 32:11>>	37.15% 38.61% 28.91%	55.498 (<.001)	4.548 (<.001)	4.428 (<.001)	2.816 (0.002)	-0.076 (0.470)	368.000 (<.001)	7.562 (<.001)
(+11,+50)	43 26:17	10.84% 11.67% 6.58%	18.807 (<.001)	2.527 (0.006)	2.526 (0.006)	0.983 (0.163)	-0.314 (0.377)	169.000 (0.020)	2.865 (0.002)

P-values are in parentheses. The symbols (,<,<<,<<< or),>,>>,>>> show the direction and generic one-tail significance of the generalized sign test at the 0.10, 0.05, 0.01 and 0.001 levels, respectively.



Figue 2: Market index

Figure 2 depicts how CAAR behave during the window of (–50, +50) when using the ($S\&P_{500}$) market index benchmark. Figure-2 shows a positive post listing CAAR over the window of (11, +50), which confirms the hypothesis that the post listing anomaly does not exist.The next step of the research is testing whether some companies time the market, while others do not. In doing so and as explained earlier in the research method, the study connects the post listing anomaly and market timing through the host market condition. That is the analysis is twofold. First, the post listing anomaly exists, while the host market condition is a positive. Second, the post–listing anomaly does not exist while the host market condition is a negative.Table 7 shows the circumstances in which the host market condition is a positive given by the ($S\&P_{500}$) index over the period (0, +50). The study reports that in the period of (11, +50), the average cumulative abnormal return is–26.19% and is significant at 0.1% level, for Patel test, TCS, signed rank test, a SCT, and,

ZSTD test. The study concludes that since the host market condition is a positive and the post listing abnormal return is a negative (post listing anomaly), then the host market condition does not explain the anomaly, and those companies time the market. The study made that assessment because the market has favorable conditions therefore the post listing CAAR should have been positive. The study explains the negative post listing CAAR as a reflection that the market participants have recognized that those companies' motives for cross-listing were nothing more than taking advantage of an up-market (market timing), which supports hypothesis **$H1_A$:**Some companies time the market. Figure 3 depicts how CAAR behave during the window of (–50, +50) when using the ($S\&P_{500}$) market index benchmark. Figure-3 shows a negative post listing CAAR over the window of (11, +50) while the host market condition is a positive, which confirms the hypothesis that the post listing anomaly does exist, but can be explained in the context of market timing.

Table 7: Market model

Market Model, +S&P500(0,+50)									
Days	N +:-	Mean Cumulative Abnormal Return /PWCAAR /Median	Patell Z	Std Csect Z	CSectErr t	Generalized Sign Z	Rank Test Z	Signed Rank	Skewness Corrected T1
(-1,+1)	20 10:10	1.33% 1.96% -0.30%	7.095 (<.001)	0.553 (0.290)	0.470 (0.319)	-0.342 (0.366)	-0.226 (0.411)	6.000 (0.420)	0.498 (0.309)
(-3,+3)	20 9:11	-0.58% 0.39% -0.40%	0.328 (0.372)	0.037 (0.485)	-0.181 (0.428)	-0.791 (0.214)	-2.130 (0.017)	-13.000 (0.324)	-0.180 (0.429)
(+1,+20)	20 1:19<<<	-14.60% -14.13% -12.78%	-22.911 (<.001)	-4.271 (<.001)	-3.770 (<.001)	-4.379 (<.001)	-6.477 (<.001)	-95.000 (<.001)	-5.429 (<.001)
(0,+50)	20 2:18<<<	-34.00% -35.09% -40.50%	-33.227 (<.001)	-5.504 (<.001)	-4.890 (<.001)	-3.931 (<.001)	-8.886 (<.001)	-97.000 (<.001)	-6.512 (<.001)
(+11,+50)	20 5:15<<	-26.19% -28.33% -31.69%	-30.461 (<.001)	-4.458 (<.001)	-4.552 (<.001)	-2.585 (0.005)	-6.940 (<.001)	-87.000 (<.001)	-4.239 (<.001)

P-values are in parentheses. The symbols (,<,<<,<<< or),>,>>,>>> show the direction and generic one-tail significance of the generalized sign test at the 0.10, 0.05, 0.01 and 0.001 levels, respectively.

Table 7 shows the circumstances in which the host market condition is a positive given by the ($S\&P_{500}$) index over the period (0, +50). The study reports that in the period (11, +50), the average cumulative abnormal return is–26.19% and is significant at 0.1% level, for Patel test, TCS, signed rank test, a SCT, and, ZSTD test. The study concludes that since the host market condition is a positive and the post listing abnormal return is a negative (post listing anomaly), and the host market condition does not explain the anomaly, and those companies time the market, which supports hypothesis **$H1_A$:** Some companies time the market. Figure-3 depicts how CAAR behave during the window of (–50, +50) when using the ($S\&P_{500}$) market index benchmark. Figure 3 shows a negative post listing CAAR over the window of (11, +50) while the host market condition

is a positive, which confirms the hypothesis that the post listing anomaly does exist, but can be explained in the context of market timing.

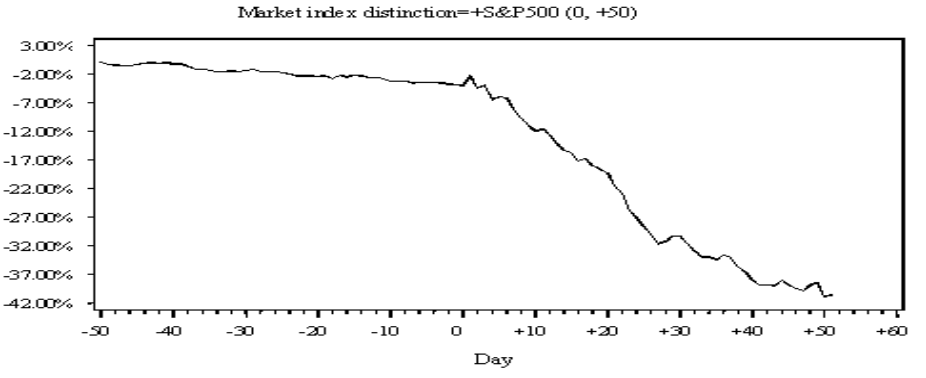


Figure 3: Market index

Table 8 shows the circumstances in which the host market condition is a negative given by ($S\&P_{500}$) index over the period (0, +50). The study reports "in the period (11, +50)" the CAAR is 17.65% and is significant at 0.1% level, for Patel test, TCS, signed rank test, a SCT, and, ZSTD test. The study concludes that since the host market condition is a negative and the post listing abnormal return is a positive then there is no post listing anomaly. Since that the host market condition cannot explain the positive CAAR for those companies, the study can conclude that these companies do not time the market because they cannot be timing a market that is negative. **$H1_B$:** Some companies do not time the market. Table 8shows the circumstances in which the host market condition is a negative given by ($S\&P_{500}$) index over the period (0, +50). The research reports "in the period (11, +50)" the average cumulative abnormal is 17.54% and is significant at 0.1% level, for Patel test, TCS, signed rank test, a SCT, and, ZSTD test. The study concludes that since the host market condition is a negative and the post listing abnormal return is a positive then there is no post listing anomaly. Since that the host market condition cannot explain the positive CAAR for those companies, The study can conclude that these companies do not time the market because they cannot be timing a market that is negative "which supports hypothesis" **$H1_B$:** Some companies do not time the market. Figure-4 depicts how CAAR behave during the window of (–50, +50) when using the ($S\&P_{500}$) market index benchmark. Figure-4 shows a positive post listing CAAR over the window of (11, +50) while the host market condition is a negative, which confirms the hypothesis that the post listing anomaly does not exist and that those companies do not time the market, and that may be the reason that they have achieved positive abnormal returns after IPO listing. Figure-4 depicts how CAAR behave during the window of (–50, +50) when using the ($S\&P_{500}$) market index benchmark. Figure 4 shows a positive post listing CAAR over the window of (11, +50) while the host market condition is a negative, which confirms the hypothesis that the post listing anomaly does not exist and that those companies do not time the market, and that may be the reason that they have achieved positive abnormal returns after IPO listing.

Table 8: Market model

Market Model, -S&P500(0,+50)									
Days	N +:-	Mean Cumulative Abnormal Return /PWCAAR /Median	Patell Z	Std Csect Z	CSectErr t	Generalized Sign Z	Rank Test Z	Signed Rank	Skewness Corrected T1
(-1,+1)	13 11:2> 	23.32% 25.36% 22.78%	83.905 (<.001)	4.486 (<.001)	4.329 (<.001)	2.303 (0.011)	2.867 (0.002)	41.500 (<.001)	5.637 (<.001)
(-3,+3)	13 11:2> 	24.35% 26.21% 19.63%	56.514 (<.001)	3.810 (<.001)	3.443 (<.001)	2.303 (0.011)	0.089 (0.465)	40.500 (0.001)	5.061 (<.001)
(+1,+20)	13 10:3> 	32.52% 34.35% 21.62%	43.398 (<.001)	3.532 (<.001)	3.378 (<.001)	1.747 (0.040)	1.731 (0.042)	39.500 (0.002)	4.889 (<.001)
(0,+50)	13 10:3> 	43.71% 46.16% 36.94%	35.560 (<.001)	3.536 (<.001)	3.479 (<.001)	1.747 (0.040)	1.469 (0.071)	38.500 (0.002)	4.287 (<.001)
(+11,+50)	13 9:4 	17.54% 17.71% 21.99%	15.612 (<.001)	2.682 (0.004)	2.812 (0.002)	1.191 (0.117)	1.419 (0.078)	30.500 (0.016)	2.868 (0.002)
P-values are in parentheses. The symbols (,<,<<,<<< or),>,>>,>>> show the direction and generic one-tail significance of the generalized sign test at the 0.10, 0.05, 0.01 and 0.001 levels, respectively.									

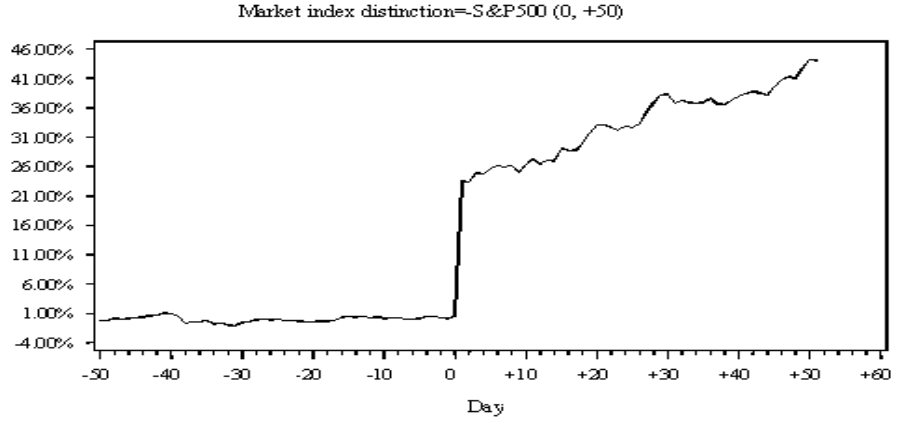


Figure 4: Market index

The study redid the same analysis performed earlier but using the PM approach as the bench market to calculate the CAAR. Table 9 shows the circumstances in which the host market condition is a positive given by the average returns of the (PM) index over the period (0, +50). The study report that in the period of (11, +50), the average cumulative abnormal return is–18.87% and is significant at 0.1% level, for Patel test, TCS signed rank test, a SCT, and, ZSTD test. The study concludes that since the host market condition is a positive and the post listing abnormal return is a negative (post listing anomaly), then the host market condition does not explain the anomaly, and those companies time the market. The study concludes that the reason those companies did not achieve positive post listing CAAR is the market participants have recognized that those

companies' motives for cross-listing were nothing more than taking advantage of an up-market (market timing). Table 9 shows the circumstances in which the host market condition is a negative given by (PM) index over the period (0, +50). The study reports "in the period of (11, +50)" the average cumulative abnormal return is 13.58% and is significant at 0.1% level, for Patel test, TCS, signed rank test, a SCT, and, ZSTD test. The study concludes that since the host market condition is a negative and the post listing abnormal return is a positive then there is no post listing anomaly. Since that the host market condition cannot explain the positive CAAR for those companies, the study concludes that these companies do not time the market because they cannot be timing a market that is negative.

Table 9: Market model

Market Model, +PM(0,+50)									
Days	N +:-	Mean Cumulative Abnormal Return /PWCAAR /Median	Patell Z	Std Csect Z	CSectErr t	Generalized Sign Z	Rank Test Z	Signed Rank	Skewness Corrected T1
(-1,+1)	20 12:8	-0.22% -0.15% 0.30%	-0.926 (0.177)	-0.054 (0.479)	-0.116 (0.454)	0.651 (0.257)	1.270 (0.102)	9.000 (0.375)	-0.116 (0.454)
(-3,+3)	20 12:8	-1.50% -1.39% 0.65%	-6.457 (<.001)	-0.521 (0.301)	-0.713 (0.238)	0.651 (0.257)	-0.541 (0.294)	-1.000 (0.493)	-0.748 (0.227)
(+1,+20)	20 5:15<<	-7.97% -9.60% -6.96%	-27.162 (<.001)	-2.856 (0.002)	-3.017 (0.001)	-2.484 (0.007)	-4.721 (<.001)	-67.000 (0.005)	-3.064 (0.001)
(0,+50)	20 1:19<<<	-24.09% -29.60% -16.48%	-50.607 (<.001)	-4.820 (<.001)	-4.791 (<.001)	-4.276 (<.001)	-7.115 (<.001)	-103.00 (<.001)	-7.899 (<.001)
(+11,+50)	20 2:18<<<	-18.87% -23.56% -13.93%	-45.943 (<.001)	-4.321 (<.001)	-4.354 (<.001)	-3.828 (<.001)	-5.956 (<.001)	-95.000 (<.001)	-5.946 (<.001)

P-values are in parentheses. The symbols (,<,<<,<<< or),>,>>,>>> show the direction and generic one-tail significance of the generalized sign test at the 0.10, 0.05, 0.01 and 0.001 levels, respectively.

Table 10: Market model

Market Model, -PM(0,+50)									
Days	N +:-	Mean Cumulative Abnormal Return /PWCAAR /Median	Patell Z	StdCsect Z	CSectErr t	Generalized Sign Z	Rank Test Z	Signed Rank	Skewness Corrected TI
(-1,+1)	13 11:2> 	23.12% 25.39% 22.56%	159.971 (<.001)	4.379 (<.001)	4.340 (<.001)	2.294 (0.011)	2.029 (0.021)	41.500 (<.001)	5.542 (<.001)
(-3,+3)	13 10:3> 	24.35% 26.71% 19.98%	107.654 (<.001)	3.851 (<.001)	3.507 (<.001)	1.738 (0.041)	-0.514 (0.304)	39.500 (0.002)	5.086 (<.001)
(+1,+20)	13 10:3> 	29.90% 32.68% 19.48%	76.601 (<.001)	3.378 (<.001)	3.296 (<.001)	1.738 (0.041)	1.358 (0.087)	39.500 (0.002)	4.688 (<.001)
(0,+50)	13 10:3> 	39.43% 44.08% 35.60%	61.392 (<.001)	3.378 (<.001)	3.346 (<.001)	1.738 (0.041)	0.703 (0.241)	35.500 (0.005)	3.990 (<.001)
(+11,+50)	13 8:5 	13.58% 15.81% 19.89%	23.759 (<.001)	2.285 (0.011)	2.325 (0.010)	0.627 (0.265)	0.417 (0.338)	27.500 (0.029)	2.399 (0.008)

P-values are in parentheses. The symbols (,<,<<,<<< or),>,>>,>>> show the direction and generic one-tail significance of the generalized sign test at the 0.10, 0.05, 0.01 and 0.001 levels, respectively.

Table 10 shows the circumstances in which the host market condition is a negative given by (PM) index over the period (0, +50). The paper reports "in the period (11, +50)" the average cumulative abnormal is 13.58% and is significant at 0.1% level, for Patel test, TCS, signed rank test, a SCT, and, ZSTD test. The study concludes that since the host market condition is a negative and the post listing abnormal return is a positive then there is no post listing anomaly. Since that the host market condition cannot explain the positive CAAR for those companies. The study can conclude that these companies do not time the market because they cannot be timing a market that is negative. **$H1_B$:** Some companies do not time the market

EMPIRICAL RESULTS (FAMA-FRENCH ESTIMATION PROCEDURE)

Fama and French, (1992) and Lakonishok *et al.* (1994) note that stock returns tend to be associated with company size as well as with BTM (book to market) ratios.To complement testing the hypothesis in this study, the study employed three-factor models, as the return generating process. The model is constructed as following:

$$R_{it} = \alpha + \beta_i R_{mt} + s_i SMB_t + h_i HML_t + \epsilon_{it}. \quad (16)$$

Then the paper defines the abnormal return for the common stock i^{th} company on day t as:

$$A_{it} = R_{it} - (\hat{\alpha} + \hat{\beta}_i R_{mt} + \hat{s}_i SMB_t + \hat{h}_i HML_t) \quad (17)$$

Where the coefficients$\hat{\alpha}_i$,$\hat{\beta}_i$,$\hat{s}_i$, and $\hat{h}_i$ are the OLS estimates of α_i,β_i,$\hat{s}_i$, and h_i (see Fama-French, 1993) for a detailed description of the model. As discussed in the section on research methodology, the study used another estimation procedure apart from the market model to estimate CAAR, the Fama-French procedure, in which they control for size and BTM ratio. Table 11 to 14 show that some companies time the market for their IPO listing overseas while other companies do not, therefore the study reaches the same conclusions reached by using the S&P500 index. Table 11shows the results of testing in which the post listing anomaly exists, that is, there are significant negative post listing CAAR and using Fama-French approach instead of risk adjusted market returns because FF controls for size and BTM. The study reports that in the days of (11, +50) post listing period, the average cumulative abnormal return is–9.94%, and is significant at 0.1% level, for Patel test, a time-series cross-sectional test (hereafter, TCS), signed rank test, a skewness corrected *t*-test (hereafter, SCT), and some other parametric and non parametric tests. Based on those results, the study concludes that the post listing anomaly exists for some companies which supports hypothesis **H_0:** Post listing anomaly exists.

Table 11: Fama-french time series model

Fama-French Time-Series Model, PM(0,+50)							
Days	N +:-	Mean Cumulative Abnormal Return /Median	CSectErr t	Generalized Sign Z	Rank Test Z	Signed Rank	Skewness Corrected T1
(-1,+1)	34	-1.42%	-1.173	-1.541	-1.523	-84.500	-1.186
	13:21(	-0.49%	(0.120)	(0.062)	(0.064)	(0.076)	(0.118)
(-3,+3)	34	-3.48%	-2.260	-1.198	-3.642	-110.50	-2.485
	14:20	-1.49%	(0.012)	(0.115)	(<.001)	(0.029)	(0.006)
(+1,+20)	34	-9.99%	-4.722	-4.286	-7.197	-227.50	-5.063
	5:29<<<	-7.41%	(<.001)	(<.001)	(<.001)	(<.001)	(<.001)
(0,+50)	34	-18.69%	-5.896	-4.972	-8.371	-265.50	-7.738
	3:31<<<	-16.34%	(<.001)	(<.001)	(<.001)	(<.001)	(<.001)
(+11,+50)	34	-9.94%	-2.945	-2.914	-5.693	-170.50	-2.939
	9:25<<	-9.15%	(0.002)	(0.002)	(<.001)	(0.001)	(0.002)

P-values are in parentheses. The symbols (,<,<<,<<< or),>,>>,>>> show the direction and generic one-tail significance of the generalized sign test at the 0.10, 0.05, 0.01 and 0.001 levels, respectively.

Table 12 shows the results of testing in which the post listing anomaly does not exist, that is, there are significant positive post listing CAAR and using Fama-French approach instead of risk adjusted market returns, because FF controls for size and BTM. The paper reports "in the days (0,+50)" post listing periodthe average cumulative abnormal return is 11.51% and is significant at 0.1% level, for Patel test, TCS, signed rank test, a SCT, and a *Z* -standardized cross-sectional test (hereafter, ZSTD). Based on those results, the study concludes that the post listing anomaly does not exist for some companies, which casts doubt on the validity of the anomaly because some companies do not show such an anomaly, which supports hypothesis; **H_A:** Post listing anomaly does not exist.

Table 12: Fama-french time series model

Fama-French Time-Series Model, PM(0,+50)							
Days	N +:-	Mean Cumulative Abnormal Return /Median	CSectErr t	Generalized Sign Z	Rank Test Z	Signed Rank	Skewness Corrected T1
(-1,+1)	43	12.58%	5.071	3.069	2.638	343.000	6.729
	32:11>>	5.68%	(<.001)	(0.001)	(0.004)	(<.001)	(<.001)
(-3,+3)	43	13.56%	4.629	2.458	0.537	340.000	6.318
	30:13>>	10.40%	(<.001)	(0.007)	(0.296)	(<.001)	(<.001)
(+1,+20)	43	19.95%	4.886	3.984	1.231	370.000	6.082
	35:8>>>	13.09%	(<.001)	(<.001)	(0.109)	(<.001)	(<.001)
(0,+50)	43	28.33%	4.975	2.764	-0.160	349.000	5.552
	31:12>>	25.70%	(<.001)	(0.003)	(0.436)	(<.001)	(<.001)
(+11,+50)	43	11.51%	2.795	0.933	-0.681	195.000	3.159
	25:18	8.89%	(0.003)	(0.175)	(0.248)	(0.008)	(<.001)

P-values are in parentheses. The symbols (,<,<<,<<< or),>,>>,>>> show the direction and generic one-tail significance of the generalized sign test at the 0.10, 0.05, 0.01 and 0.001 levels, respectively.

Table 13 shows the circumstances in which the host market condition is a positive given by the average returns of the (PM) index over the period of (0, +50) and using Fama-French approach instead of risk adjusted market returns because FF controls for size and BTM. The study reports that in the period of (11, +50), the average cumulative abnormal return is–16.6% and is significant at 0.1% level, for Patel test, TCS, signed rank test, a SCT, and, ZSTD test. The study concludes that since the host market condition is a positive and the post listing abnormal return is a negative (post listing anomaly), and the host market condition does not explain the anomaly, and those companies time the market, which supports hypothesis; **$H1_A$:** Some companies time the market.

Table 13: Fama-french time series model

Fama-French Time-Series Model, +MP(0,+50)							
Days	N +:-	Mean Cumulative Abnormal Return /Median	CSectErr t	Generalized Sign Z	Rank Test Z	Signed Rank	Skewness Corrected T1
(-1,+1)	20	-0.19%	-0.100	0.700	0.942	10.000	-0.100
	12:8	0.23%	(0.460)	(0.242)	(0.173)	(0.361)	(0.460)
(-3,+3)	20	-1.40%	-0.689	0.700	-1.054	-2.000	-0.717
	12:8	0.44%	(0.245)	(0.242)	(0.146)	(0.478)	(0.237)
(+1,+20)	20	-7.08%	-2.548	-2.433	-5.212	-61.000	-2.556
	5:15<<	-4.75%	(0.005)	(0.007)	(<.001)	(0.011)	(0.005)
(0,+50)	20	-21.39%	-4.489	-4.224	-7.385	-95.000	-5.719
	1:19<<<	-16.90%	(<.001)	(<.001)	(<.001)	(<.001)	(<.001)
(+11,+50)	20	-16.60%	-4.157	-2.881	-5.961	-89.000	-5.100
	4:16<<	-12.38%	(<.001)	(0.002)	(<.001)	(<.001)	(<.001)

P-values are in parentheses. The symbols (,<,<<,<<< or),>,>>,>>> show the direction and generic one-tail significance of the generalized sign test at the 0.10, 0.05, 0.01 and 0.001 levels, respectively.

Table 14: Fama-french time series model

Fama-French Time-Series Model, -PM(0,+50)							
Days	N +:-	Mean Cumulative Abnormal Return /Median	CSectErr t	Generalized Sign Z	Rank Test Z	Signed Rank	Skewness Corrected T1
(-1,+1)	13	23.05%	4.300	2.446	1.575	40.500	5.402
	11:2>>	22.67%	(<.001)	(0.007)	(0.058)	(0.001)	(<.001)
(-3,+3)	13	24.36%	3.498	1.891	-0.002	39.500	4.994
	10:3>	19.58%	(<.001)	(0.029)	(0.499)	(0.002)	(<.001)
(+1,+20)	13	30.26%	3.377	2.446	1.678	40.500	4.812
	11:2>>	19.49%	(<.001)	(0.007)	(0.047)	(0.001)	(<.001)
(0,+50)	13	39.40%	3.412	1.891	0.629	36.500	4.120
	10:3>	34.35%	(<.001)	(0.029)	(0.265)	(0.004)	(<.001)
(+11,+50)	13	13.54%	2.409	0.782	0.267	28.500	2.511
	8:5	19.80%	(0.008)	(0.217)	(0.395)	(0.024)	(0.006)

P-values are in parentheses. The symbols (,<,<<,<<< or),>,>>,>>> show the direction and generic one-tail significance of the generalized sign test at the 0.10, 0.05, 0.01 and 0.001 levels, respectively.

Table 14 shows the circumstances in which the host market condition is a negative given by (PM) index over the period of (0, +50) and using Fama-French approach instead of risk adjusted market returns because FF controls for size and BTM. The paper reports "in the period (11, +50)" the average cumulative abnormal is 13.54% and is significant at 0.1% level, for Patel test, TCS, signed rank test, a SCT, and, ZSTD test. The study concludes that since the host market condition is a negative and the post listing abnormal return is a positive then there is no post listing anomaly. Since that the host market condition cannot explain the positive CAAR for those companies. The study can conclude that these companies do not time the market because they cannot be timing a market that is negative; $H1_B$: Some companies do not time the market.

SUMMARY AND CONCLUDING REMARKS

The study showed that there is no post listing anomaly because the article explained it in the context of market timing and host market condition. Why do companies cross-list? The literature gives several reasons, but the most prominent of them all is that companies who cross list want to maximize their returns. This study confirms previous research that there is a pre-listing run-up in price and, hence, an increase in pre-listing returns and confirms that on or around the cross-listing date, there are positive returns.However, the research presented evidence that shows that some companies' cross-list based on either a market timing consideration or an actual performance consideration. This study elaborated on the former, which is companies cross-list because of market timing aspect, and not only did the evidence show that some companies time the market while others do not, but also explains the "post listing anomaly". The sample evidence shows that

the host market condition plays a pivotal role in answering the combined questions of why companies cross-list and why the literature document what so called the "post listing anomaly". On one, hand, the evidence reveals companies that cross-list in a host market while that market condition is "positive" and achieve significant negative post listing CAAR are companies that are timing the market, and that is why the so called "anomaly" exists. On the other hand, the evidence reveals if companies cross-list in a host market while that host market condition is "negative" and achieve positive post listing CAAR whether significant or not, then those companies are not timing the market, because why would they time a market that is down? Moreover, this demonstrates that the "post listing anomaly" does not exist, which indicates that it is not an anomaly.This study opens up the field for further research questions, such as does benchmark matter in determining the CAAR; does the choice of a different host market index affect the results; is there evidence of earnings management for companies that time the market; and finally what are the main drivers for CAAR.

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