Descriptive analysis of medium and long-run performance of IPOs: case of firms funded by private equity in Morocco

Analyse descriptive des performances à moyen et long terme des introductions en bourse: Cas des entreprises financées par capital investissement au Maroc

BELQASMI Sabrine
Research and studies Laboratory in Finance, Auditing and Management, National School of Commerce and Management (NSCM), Tangier, Morocco
Abdelmalek Essaâdi University, Tetouan
Morocco
sabrine_belqasmi@yahoo.fr

Date de soumission : 28/02/2021

Date d'acceptation : 02/05/2021

Pour citer cet article :

BELQASMI S. (2021) «Descriptive analysis of medium and long-run performance of IPOs: case of firms funded by private equity in Morocco», Revue Internationale du Chercheur «Volume 2 : Numéro 2» pp : 730 - 748

Abstract:

Private equity is a relatively recent activity in Morocco, which is really developed since the 2000s to establish itself today as a source of financing for SMEs, and the IPO is one methods of exiting capital investors, it is therefore interesting to study the impact of capital investors presence in these firms on their stock market performance.

This paper examines the long-run stock market performance of Moroccan Initial Public Offerings (IPOs) between 2000 and 2018 on a sample of 13 funded firms listed in Casablanca stock market, using the cumulative abnormal returns (CAR) and the buy-and-hold returns (BHAR) methods, besides an hybrid method based on the MTB ratio. Our findings show a stock market underperformance of firms over the 36 to 60 months of quotation.

Keywords: private equity, IPO, underpricing, long-run performance, underperformance.
JEL Classification: G10, *G11, G15, G20,* G23, *G24, G31, G32*

Résumé :

Le capital investissement est une activité relativement récente au Maroc, qui s'est vraiment développée depuis les années 2000 pour s'imposer aujourd'hui comme une source de financement pour les PME, et l'introduction en bourse est une des méthodes de sortie des investisseurs en capital. Il est donc intéressant d'étudier l'impact de la présence des investisseurs en capital dans ces entreprises sur leur performance boursière.

Cet article examine la performance boursière à long terme des introductions en bourse (IPO) marocaines entre 2000 et 2018 sur un échantillon de 13 entreprises financées cotées en bourse de Casablanca, en utilisant les méthodes des rendements anormaux cumulés (CAR) et des rendements composés (BHAR), en plus d'une méthode hybride basée sur le ratio MTB. Nos résultats montrent une sous-performance boursière des entreprises sur les 36 à 60 mois de cotation.

Mots clés: capital investissement ; introduction en bourse ; sous-évaluation ; performance à long terme ; sous-performance.
JEL Classification: G10, *G11, G15, G20,* G23, *G24, G31, G32*

Introduction

Newly listed companies register an increase in prices in the first days of listing and therefore an outperformance in the short term. This trend is reversed in the medium and long term. Indeed, the performance deteriorates to the point of posting negative abnormal returns.

The long-term performance of IPOs, such as the short-term, varies over time.

Internationally, the study of long-term returns hasn't been done in all countries around the world (may be because of relatively little interest compared to that of the short-term anomaly). The results showed that the underperformance of IPOs noted by (Ritter, 1990) and confirmed by other researchers is not generalized internationally. Indeed, IPOs in Sweden and Korea according to (Loughran, Ritter and Rydqvist, 1994) and (Kim, Krinsky and Lee, 1995) respectively, outperform the market or benchmark companies. However, the majority of the explored IPO markets show a long term underperformance.

The same controversy concerns backed IPOs performance, and the various results confirm that the impact of the presence of Investors capital on the performance of the financed companies remains a question to be explored,

This empirical ambiguity, probably due to the methodologies adopted or to the persistence of conflicts of interest after IPO, prompted us to clarify this association for the Moroccan case by trying to respond first in our Moroccan context to the problem raised by the following questioning: **Do companies, backed by private equity, listed on the Casablanca stock exchange achieve an out- or underperformance?**

So, in this paper, we are interested in the Moroccan stock market medium and long-term Performance, by measuring stock market returns of 13 firms funded by private equity listed in Casablanca stock exchange.

The rest of this paper is organized as follows. In section 1, we present a non-exhaustive literature relating to the study of the medium and long-term stock market performance of companies listed on the stock exchange. Then we describe, in section 2, the research methodology adopted and the sample, the empirical results are presented in section 3, before drawing an overall conclusion

1. Literature Review

Several studies, in different countries, such as those of (Stoll and Curley, 1970) and (Stern and Bornstein, 1985) on the American market, (Degeorge and Derrien, 2001) in France, (Levis,1993) in the United Kingdom, (Jog, 1997) and (Kooli and Suret, 2004) in Canada,

(Uhler, 1989) and (Ljungqvist, 1997) in Germany, (Finn and Higham, 1988) in Australia, (McGuinness, 1993) in the Hong Kong market, (Aggarwal, Leal and Hernandez, 1993) on the Brazilian, Mexican and Chilean markets, Cai and Wei (1997) in Japan and (Ahmad-Zaluki, Campbell and Goodacre, 2007) in Malaysia, analyzed the stock market performance in the medium and long term of IPOs, and confirmed everything observation of medium and long term underperformance.

By comparing the average returns of a sample of 1,526 companies listed on the New York Security Exchange "NYSE" between 1975 and 1984 with those of a control sample of companies with similar characteristics in terms of size and industry, Ritter (1991) finds an average return of 34% in the 3rd year of listing against 62% for the control sample (i.e. an underperformance of -28% on average) and concludes that these IPOs are underperforming and that companies that are introduced during a period of strong price increases have recorded the lowest returns. And this is explained, according to the author, that the underperformance is linked to the over-optimism of investors who took advantage of the benefits of a window of opportunity but who realized their long-term mistakes and adjusted downward. their anticipations towards equilibrium values.

Studying a larger sample of 4,753 IPOs and 3,702 subsequent issues, (Loughran and Ritter, 1995) found between the 1970s and 1990s an underperformance of -26.9% for the five years following the date of the event. Their evidence is consistent with "a market where companies take advantage of transitional windows of opportunity by issuing stocks when, on average, they are significantly overvalued." (p. 46).

(Jog, 1997), for his part, confirmed the results obtained on the American market, by studying, on the Canadian market, a sample of 149 IPOs between 1971 and 1992 and for which he reported abnormal returns of -35 , 15% compared to the TSE 300 index and -43.66 compared to the TSE-Western index taken as benchmark portfolios.

These same results of (Jog ,1997) were well confirmed in the Canadian market also by (Kooli and Suret, 2004) when they studied a sample of 445 IPOs between 1991 and 1998 and found an underperformance of –9, 39% to -19.96 over the three years following the date of the event.

The study carried out by (Degeorge and Derrien, 2001) in France, is made on a sample of 243 IPOs carried out between 1991 and 1998 using three different benchmarks: the MIDCAC index, sectoral indices and comparison portfolios having the same characteristics in terms of market capitalization and book-to-market.

By calculating the abnormal returns by the two methods CAR (Cumulative Abnormal Return) and BHAR (Buy and Hold Abnormal Return), the authors used a combination of these two methods and the three different benchmarks and concluded that the stock market performance depends on the methodology used: thus over 36 months the abnormal returns are negative only when the benchmark comparison is based on the activity sector, while they are positive if the comparison is made in terms of market capitalization and book-to-market , which prompts (Degeorge and Derrien, 2001) to conclude overall that there are no abnormal negative returns over a period of up to 36 months after listing.

(Gajewski and Gresse, 2004), for their part, devoted part of their study of the performance of IPOs in 15 European countries, to France and showed from a sample of 362 IPOs over the period 1995- 2004 that the companies introduced achieve negative abnormal returns over the first three years post-listing compared to the market benchmarks retained varying between -36.33% for the CAR calculation method and -57.61% for the BHAR method.

On the German market, (Ljungqvist, 1997) affirms, from the study of a sample of 180 IPOs between 1970 and 1993 over three years after listing, the existence of an underperformance of 12.11% compared to the market index, and specifies that this underperformance only concerns companies introduced between 1988-1990. For companies introduced during the period 1978-1987, this underperformance was only around -1.8%.

This result, like that found by (Uhler, 1989) on the German market, emphasizes the differences in underperformance according to the periods analyzed.

For the United Kingdom market (Levis, 1993) studies a sample of 712 IPOs between 1980 and 1988 and observes an abnormal profitability of -22.96% over three years.

In Australia, (Lee, Taylor and Walter, 1996) find an abnormal profitability of -51.26% over the first three years post-listing, studying a sample of 266 introductions during the period 1976-1989.

In New Zealand, (Firth, 1997) observed an underperformance of -14% and -17.91% respectively for three and five years after listing by studying a sample of 143 IPOs between 1979 and 1987.

While in Japan, (Cai and Wei, 1997), found an underperformance of between -14.4% and -66.9% depending on the benchmark used, when they studied a sample of 180 introductions between 1971 and 1992 using the market index and a benchmark portfolio as benchmarks.

(Dawson, 1987) studies on the Hong Kong, Singapore and Malaysia markets showed a decline in stock market performance of -9.3%, -2.7% and -18.2% respectively for the year following the date of the listing. in stock exchange.

(Aggarwal, et al. 1993), for their part, observed an underperformance of –47%, –19.6% and –23.7% for the three years following the IPO, by studying respectively a sample of 62 companies IPOs between 1980 and 1990 on the Brazilian market, a sample of 44 companies introduced between 1987 and 1990 on the Mexican market and a sample of 36 companies introduced between 1982 and 1990 on the Chilean market.

Unlike all these studies which have observed a deterioration in performance, others have questioned this deterioration and have shown an improvement in stock market performance over the medium and long term.

Among these we can cite the work of (Kim, Krinsky and Lee, 1995) on the Korean market which found an improvement between 80.63% and 91.59% during the period 1985-1989.

Those of Jelic, et al., (2001) on the Malaysian market which found an outperformance of 24.83% during the period 1980-1995.

The work of Corhay, et al., (2002) who observed an outperformance of 41.71% during the period 1992-1996, still on the Malaysian market.

The study by Da Silva et al. (2003) on the Australian market during the period 1991-1999 in which the authors pointed out that stock market returns vary between -2.16% to 13.56% and 7.5% and 32.69% depending on the yield measurement method used.

In Morocco, Talbi Alami (2018) has studied a sample of 29 IPOs between 2005 and 2011 and observed an underperformance of -52% after 36 months and -66,61% after 60 months of listing;

Zahira Batoul (2018) studies a sample of 15 Pakistanish IPOs firms from 2006 to 2011

2. Methodology

Several methods of calculating long-term performance exist and none of them enjoys decisive advantages in terms of statistical rigor and economic significance ((Brav et al. 2000), (Barber and Lyon, 1997), (Brav and Gompers, 1997)).

For this, we use in this work several methodologies to measure long-term performance depending on the method of calculating abnormal returns and the benchmark used.

For stock market performance, two standard event study methods exist to calculate abnormal returns, namely the cumulative abnormal returns method (Cumulative Adjusted Return, CAR) and the buy-hold return method (Buy and Hold Adjusted Return, BHAR).

The CARit and BHARit are calculated for company "i" over the period t of three and five years after IPO from the 1st day of listing.

Using the two methods of measuring long-term stock market performance, we define four measures of this long-term stock market performance:

• Cumulative abnormal returns adjusted by the returns of the "CARc" control sample.

• Cumulative abnormal returns adjusted by those of the market index (MASI) "CARm".

• Compound abnormal returns adjusted by the returns of the "BHARc" control sample.

• Compound abnormal returns adjusted by those of the market index (MASI) "BHARm".

In addition to these CAR and BHAR measurements, another method called the hybrid method is also used in the calculation of stock market performance; it is based on the MTB ratio which is the market to-book.

2.1. Sample and data:

The constitution of our sample is established on the basis of newly listed companies.

Among the 75 IPOs between the year 2000 and the year 2018, we eliminated, first of all, companies belonging to the financial sector (banks, insurance companies and finance companies, etc.), due to the fact that they are subject to precise regulations on accounting and prudential ratios.

Then, we selected the companies whose information on the identity and shareholding of shareholders in their capital before and after IPO is complete, and on the matching criteria that we have chosen.

In total, we obtained 26 companies, 13 of which are financed by Private Equity which constitute our basic sample, the 13 others form the control companies.

A matching methodology was used based on a three-fold criterion of market capitalization, company size and industry.

We then matched each of the 13 funded firms with the one that has the same criteria (within a range of + or - 30% for capitalization).

2.2. The dependent variable: long-term performance

We use long-term performance as a dependent variable, first, because the undervaluation, which is based solely on the wealth created or transferred in the short term (during the first day (s) of the IPO) and does not take into account the returns of the title over the long term, and then in order to be able to compare our results with those found on other markets by other authors.

For the cumulative abnormal returns, the calculation of long-term abnormal returns involves the following steps:

■ The abnormal returns of company i, adjusted for the returns of its benchmark, for event month t (AR i, t), are calculated according to the following equation:

$$AR_{i,t} = R_{i,t} - E(R_{i,t})$$

With:

R i, t: performance of company i during event month t;

E (R i, t): yield of its benchmark during event month t.

■ The average abnormal returns of a portfolio of N companies for event month t (AR t), are the arithmetic mean of the abnormal returns calculated as follows:

$$AR_t = \frac{1}{N}\sum_{t=1}^{N} AR_t$$

With:

N: number of IPOs.

■ The cumulative abnormal returns of a portfolio of N companies during period T (CAR T) are defined as the sum of the average abnormal returns (AR t). They are calculated by the following equation:

$$CAR_T = \sum_{t=1}^{N} AR_t$$

With:

T: period of observation of abnormal returns.

To also interpret the abnormal performance of companies over the entire study period, we borrow from Ritter (1991), Levis (1993) and Ljungqvist (1997) the indicator of "relative wealth" ("relative wealth"). (WR CAR) defined as follows:

$$WR_{CAR} = \frac{1 + (\frac{1}{N}\sum_{i=1}^{N}\sum_{t=1}^{N} R_{i,t})}{1 + (\frac{1}{N}\sum_{i=1}^{N}\sum_{t=1}^{N} E(R_{i,t}))}$$

A relative wealth indicator (WR CAR) greater than 1 is synonymous with the outperformance of the companies studied compared to their benchmarks. On the other hand, when such an indicator is less than 1, newly introduced securities are considered underperforming.

Concerning the calculation of the abnormal compound returns, it goes through the following steps:

■ The abnormal "buy-and-hold" returns of company i adjusted to the benchmark returns during period T, (BHAR i, T), are defined as follows:

$$\boldsymbol{BHAR}_{\mathbf{i,T}} = \prod_{t=1}^{T}(1 + \boldsymbol{R}_{\mathbf{i,t}}) - \prod_{t=1}^{T}(1 + \boldsymbol{E}(\boldsymbol{R}_{\mathbf{i,t}}))$$

■ The average "buy-hold" abnormal returns of a portfolio of N companies, during period T (BHAR T), is defined by the following relationship:

$$\boldsymbol{BHAR}_{\boldsymbol{T}} = \frac{1}{N}\sum_{i=1}^{N}\boldsymbol{BHAR}_{\mathbf{i,T}}$$

We also refer to the "relative wealth" indicator (WR BHAR), defined as:

$$\boldsymbol{WR}_{\boldsymbol{BHAR}} = \frac{\frac{\mathbf{1}}{\boldsymbol{N}}\sum_{i=1}^{N}\prod_{t=1}^{T}(\mathbf{1} + \boldsymbol{E}(\boldsymbol{R}_{\mathbf{i,t}}))}{\frac{\mathbf{1}}{\boldsymbol{N}}\sum_{i=1}^{N}\prod_{t=1}^{T}(\mathbf{1} + \boldsymbol{E}(\boldsymbol{R}_{\mathbf{i,t}}))}$$

Where :

WR $BHAR_T$: is the relative wealth ratio for period T, ranging from month 1 to month T after the IPO.

R i, t: is the return of company i during month t after the IPO;

R m, t: is the return on the benchmark index or portfolio over the same period;

N: is the number of IPOs.

3. Empirical Results :

We analyze the medium and long-term post-listing stock market performance of companies financed by private equity. Two measures are presented for each of the BHAR and CAR methods in order to calculate the abnormal stock returns, in addition to a hybrid measure used by some authors which is the MTB.

We first adjust the returns of the private equity-financed firms studied to the returns of comparable firms introduced (matched on the basis of size, capitalization and industry) and then to the returns of the MASI index.

The results obtained by the event-driven approach appear in the following tables (table 1 page 9 and table 2 page 10):

Table 1: The abnormal medium and long term returns of the 36th month after listing.

Methods	N	WR	Mean	Single sample t-Test	Median	Single sample Wilcoxon rank Test
CARc	13	0,951	-0,066	-0,973	-0,105	-0,804
CARm	13	0,936	-0,063	-0,558	0,000	-0,353
BHARc	13	0,611	-1,246**	-2,283	-0,357*	-1,712
BHARm	13	0,592	-1,563*	-1,879	-0,658*	-1,712
***significant at the 1% level; **significant at the 5% level; *significant at the 10% level						

Source: established by us.

The table 1 shows a disparity in performance means varying between -0,063 (for CARm) and -1,563 (for BHARm) but only the measures of BHAR are significant respectively at the 10% level for BHARm with -1,563 and at the 5% level for BHARc with -1,246

Table 2: The abnormal medium and long term returns of the 60th month after listing.

Méthodes	N	WR	Mean	Single sample t-Test	Median	Single sample Wilcoxon rank Test
CARc	13	0,977	-0,061	-0,661	-0,018	-1,083
CARm	13	0,973	-0,025	-0,275	-0,061	-0,800
BHARc	13	0,543	-1,884*	-1,999	-0,497*	0,087
BHARm	13	0,252	-1,894*	-2,079	-0,898*	-1,782
***significant at the 1% level; **significant at the 5% level; *significant at the 10% level						

Source: established by us.

Trough the table 2 we observe a great disparity in performance means varying between -0,025 (for CARm) and -1,894 (for BHARm), we also observe that only the measures of BHAR are significant at the 10% level for BHARm with -1,894 and for BHARc with -1,884

The comparison of the gross returns of the companies studied with those of the various benchmarks reveals negative and increasing CAR returns.

Over the 36 months of listing, the Moroccan companies studied underperform the stock market by (-27.33%) compared to the controlling companies and (-27.84%) compared to the market return. This performance is therefore close to that recorded by previous studies.

In the United States, and over a period of three years after the listing on the stock exchange (Ritter, 1991) indicates an underperformance of -29.1% using as a benchmark listed companies matched by sector and by size.

Still on the American market, (Loughran and Ritter, 1995) reveal an underperformance of -26.9% using a control sample.

On the Canadian market, (Jog, 1997) confirms the results found on the American market. It reports anomalous returns of -35.15% and -43.66% respectively against two benchmarks.

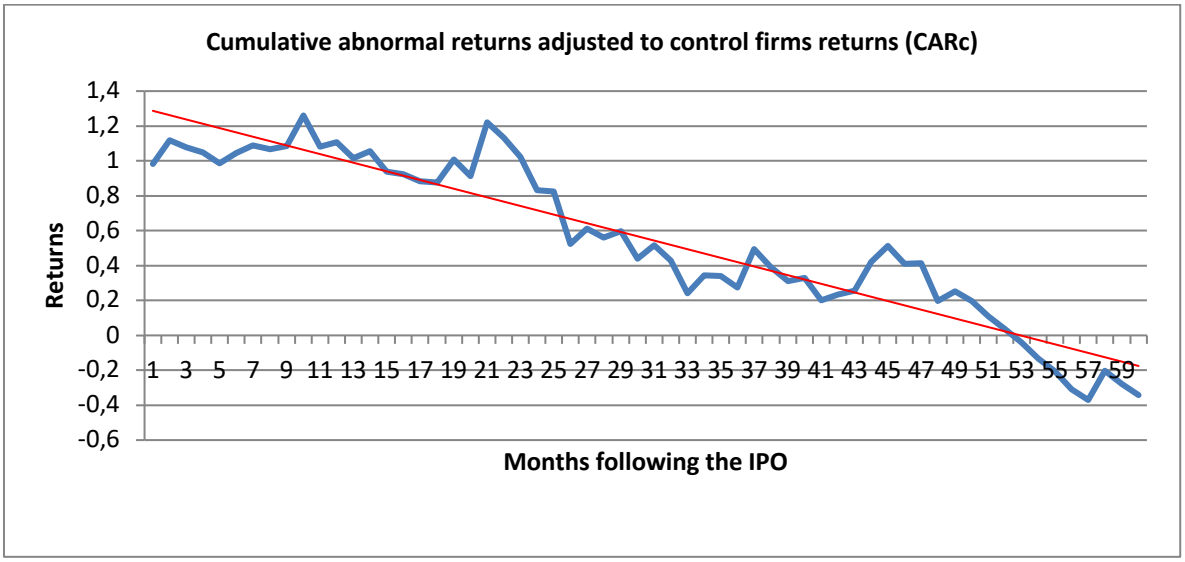
In another study on the Canadian market, (Kooli and Suret, 2004) confirm the results of (Jog, 1997) and report a less severe underperformance of -9.39% to -19.96% over the three years that follow the date of introduction.

Likewise, on the Tunisian stock market, (Bennaceur & Ghanem 2001) notes that the underperformance over 3 years for 16 introductions is -22% compared to the Tunindex index.

Over 60 months of quotation, the companies studied record a stock market underperformance of (-34.06%) compared to the controlling companies and (-61.11%) compared to the market return. This performance seems close to that recorded by Swiss companies (-31.15%) studied by (Drobetz, et al. 2005).

In the following figures we will draw up the evolution of cumulative abnormal returns during the 60 months following the IPO.

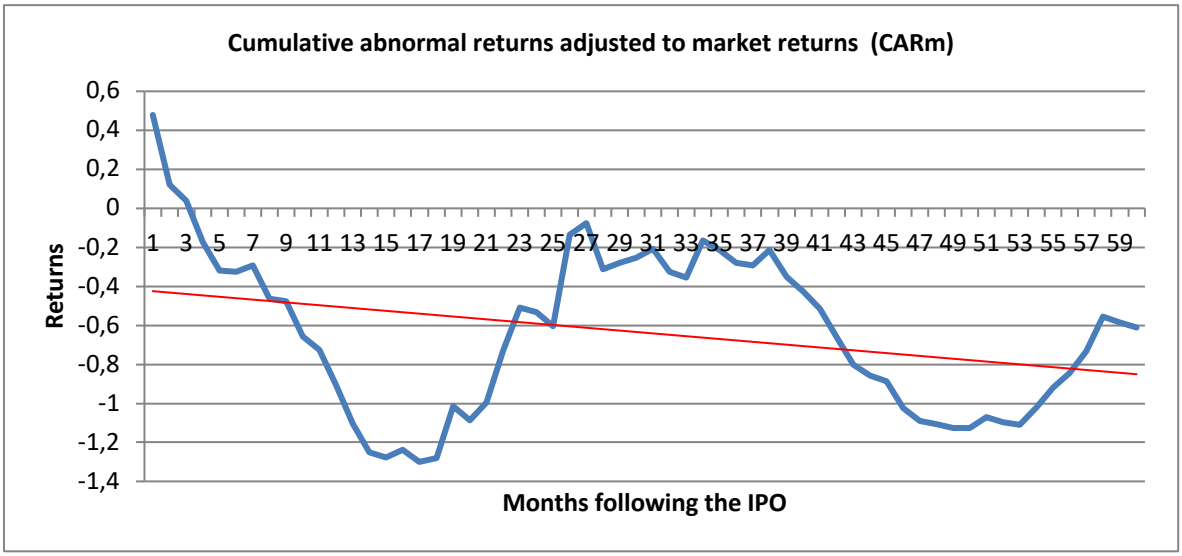
Figure 1: evolution of cumulative abnormal returns ajusted to control firms returns (CARc).



Source: established by us.

The cumulative abnormal returns experience deterioration until the 60th month. The decline begins from the 9th month for cumulative returns adjusted to controlling firms.

Figure 2: evolution of cumulative abnormal returns ajusted to market returns (CARm).



Source: established by us.

For cumulative abnormal returns adjusted to market returns, the decline begins in the 9th month.

Although over this period of decline (from 9th to 23rd month and from 37th to 60th month), the abnormal returns were not all significant but the relative "relative wealth" ratios are all less than 1; which corroborates the significance of the average of the abnormal returns over the entire period.

The BHAR method reveals a higher stock market underperformance than the CAR method.

It varies after 36 months of detention between (-32.6%) and (-38.21%) depending on the benchmark considered.

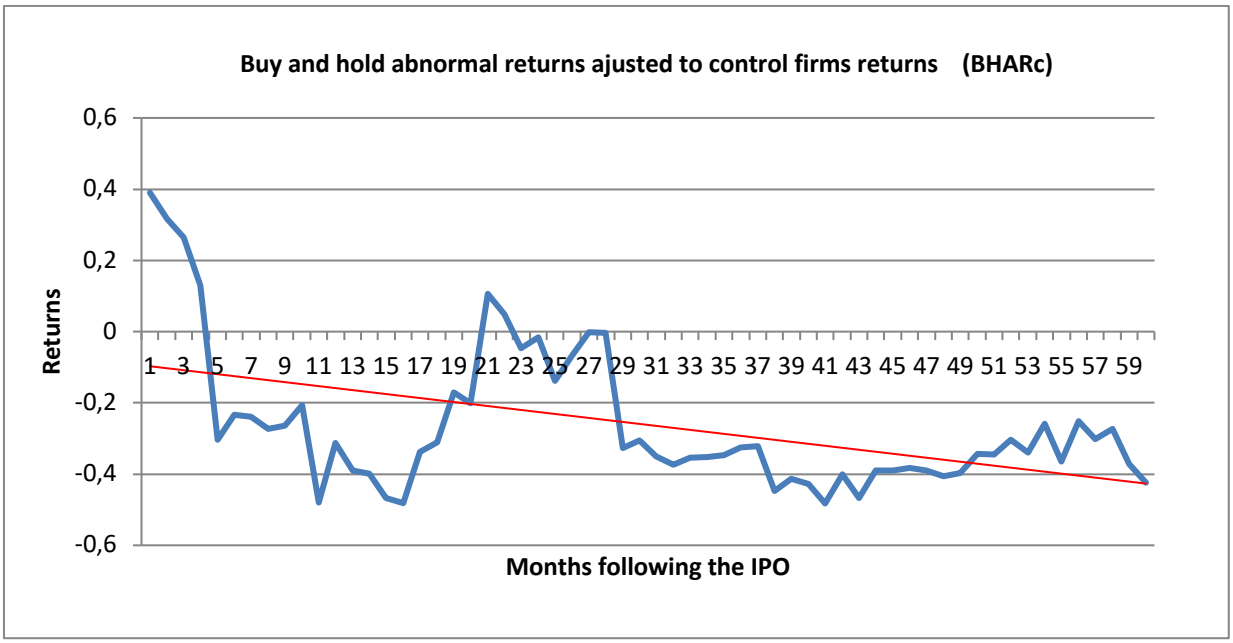
The stock market underperformance of Moroccan companies is therefore close to that achieved using the same methodology by German companies (-32.80%) studied by (Jaskiewicz, et al., 2005), as well as that of Spanish companies studied by (Jaskiewicz, et al., 2005) who record an underperformance of (-36.7%) and finally (-38.06%) recorded by the Swedish companies studied by (Fredrick, Otto, 2006).

Over 60 months of holding the securities of the Moroccan companies studied, the underperformance was (-42.35%) compared to controlling companies and (-64.01%) compared to the market index.

This performance seems close to that recorded by American companies (-43.40%) studied by (Brav, Gompers, 1997).

The figures below show the evolution of compound returns during the 60 months following the IPO.

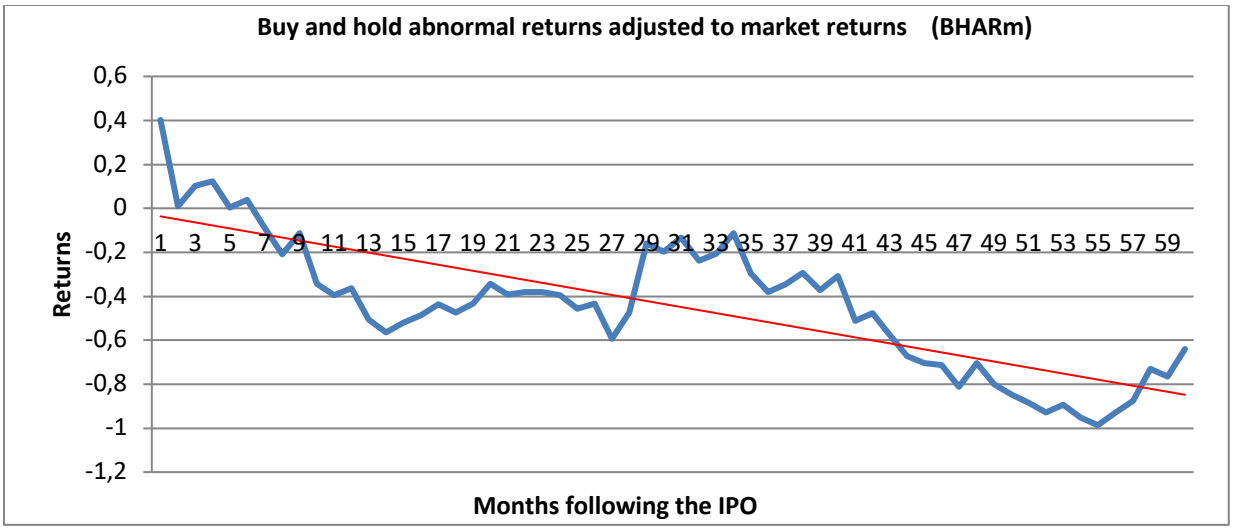
Figure 3: Evolution of buy and hold returns adjusted to control firms returns (BHARc).



Source: established by us.

For the Buy and hold abnormal returns adjusted to control firms we note deterioration in performance up to the 60th month, the decline begins in the 5th month.

Figure 4: Evolution of buy and hold returns adjusted to market returns (BHARm).



Source: established by us.

For Buy and hold abnormal returns adjusted to market returns, the decline begins in the 7th month.

Although not all abnormal returns were significant but the relative "relative wealth" ratios are all less than 1; which corroborates the significance of the average of the abnormal returns over the entire period.

In addition, the returns calculated using the Buy and hold abnormal returns (BHAR) method are all significant.

After 36 months of detention, the BHARc significant at the threshold of 5% for the Student's test and of 10% for the Wilcoxon test and the BHARm significant at the threshold of 10% for the Student's test and the Wilcoxon test.

By fitting these results with the interpretation of the “relative wealth (WR)” ratio, an investor who bought at the offer price and who held the securities for the first three years of listing, would achieve relatively (0.592) to (0.611) of his initial bet.

After 60 months of detention, the BHARc and the BHARm are significant at the 10% threshold for the Student test and the Wilcoxon test.

By fitting these results with the interpretation of the “relative wealth (WR)” ratio, an investor who bought at the offer price and who held the securities for the first five years of listing, would achieve relatively (0.252) to (0.543) of his initial stake.

On the other hand, the stock market performance of companies is also captured through the Market-to-book (MTB) ratio. This ratio is considered as a hybrid measure making it possible to assess the level of valuation of a share by the market.

The table below shows the evolution of the Market-to-book ratio over the five years after the stock market listing.

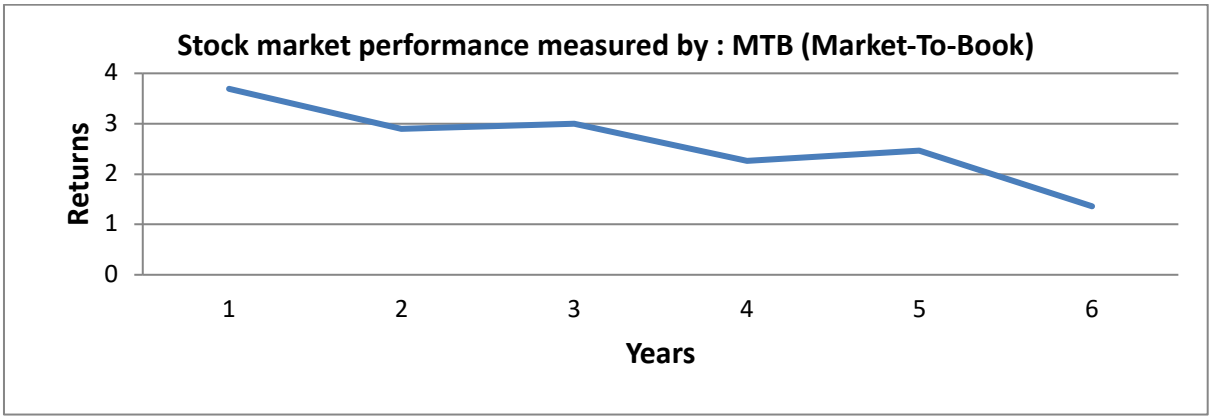
Table 3: Changes in stock market performance measured by: MTB (Market-to-Book).

MTB (Market-to-Book)						
Years	0	1	2	3	4	5
Number of observations	13	13	13	13	13	13
Abnormal performance mean (N – N-1)	3,692***	2,897***	3,005**	2,262***	2,463**	1,360***
Anormal performance median (N – N-1)	2,647***	2,776***	1,797***	1,809***	1,973***	1,003***
Wilcoxon rank Test	3,180	3,180	3,059	3,959	3,059	3,059
***significant at the 1% level; **significant at the 5% level; *significant at the 10% level						

Source: established by us..

The mean (median) of the market-to-book ratio of CI-funded companies experienced a significant decrease between the year of IPO (n) and the 5th year after listing (n +5), it goes from 3.692 (2.647) to 1.360 (1.003).

Figure 5: Changes in stock market performance measured by: MTB (Market-to-Book).



Source: established by us.

The figure 5 show clearly the decrease of performance from the year before IPO to the fifth year following this IPO

Conclusion

Concerning the medium and long term profitability calculated by the CAR (cumulative abnormal return) and BHAR (buy-and-hold abnormal return) methods and adjusted on the one hand to the MASI market index (CARm and BHARm) and on the other hand to control companies having the same criteria as those of the basic sample in terms of size, sector of activity and capitalization (CARc and BHARc).

The average values of the returns CARc (adjusted to control companies) and CARm (adjusted to the market) drop respectively from -27.33% over a period of 36 months to -32.6% over a period of 60 months for CARc and from -27.84% over a period of 36 months to -38.21% over a period of 60 months for CARm

The average values of the returns BHARc and BHARm, for their part, go, for BHARc from -34.06% over three years to -42.35% over five years, and for BHARm, from -61.11% over three years to -64.01% over five years.

And like (Shome and Singh, 1995) stock market performance has been approached by another hybrid measure, which is the MTB (market-to-book) ratio.

According to our results, MTB stocks have deteriorated from the year of IPO (n) to the fifth year after listing (n + 5).

Thus the mean (median) value of the MTB ratio went from 3.692 (2.647 as median) in the year (n) of IPO to 1.360 (1.003 as median) in year (n + 5).

These results show that the hypotheses put forward by the literature on medium and long-term stock market performance seem to be confirmed in the Moroccan market.

As any research the ours has not been without limits, so the first and the main limit that could be raised about our research is the size of the sample. Indeed, a sample of 13 companies financed by private equity might seem insufficient for the study to be generalized across all private equity activity.

For the research contributions:

At the methodological level, we consider that the most important contribution of this research consists, first, in having recourse to two benchmarks, the first being the control company and the second the market index, then in the use of different methods of calculating abnormal returns in the medium and long term CAR and BHAR for stock market performance and MTB as a hybrid measure.

At a more applied level, the managers, armed with the lessons provided by this research, could adapt their selection of the private equity companies that support them. And ICs are becoming even more aware that their contribution is not limited only to providing financial resources.

To follow up on this research, it would be interesting to try to clarify in a subsequent research the different explanations given by the literature to this evolution of returns, among others the ownership structure and other governance mechanisms.

REFERENCES

Aggarwal, R., R. Leal et L. Hernandez, (1993). «The After Market Performance of Initial Public Offerings in Latin America ». Financial Management, Vol. 22, pp. 42-53.

Ahmad-Zaluki, N. A., Campbell, K., & Goodacre, A. (2007). « The long run share price performance of Malaysian initial public offerings (IPOs) ». Journal of Business Finance & Accounting, Vol. 34, N° 1-22, pp. 78-110.

Barber, B. M., & Lyon, J. D. (1997). « Detecting long-run abnormal stock returns: The empirical power and specification of test statistics ». Journal of financial economics, Vol. 43, N° 3, pp. 341–372.

Ben Naceur, S., & Ghanem, H. (2001). « The Short–and Long–run Performance of New Listings in Tunisia ». International Review of Finance, Vol. 2, N° 4, pp. 235-246.

Brav, A. & Gompers, P., (1997). « Myth or reality? The long-run underperformance of IPOs: Evidence from venture and non-venture capital-backed companies ». Journal of Finance Vol. 52, pp. 1791– 1821.

Brav, et al. (2000). « Is the Abnormal Return Following Equity Issuances Anomalous? » Journal of Financial Economics, Vol. 56, N° 2, pp. 209-249.

Cai, J., & Wei, K. J. (1997). « The Investment and Operating Performance of Japanese Initial Public Offerings ». Pacific-Basin Finance Journal, Vol.5, N° 4, pp. 389-417

Corhay et al. (2002). « The Long Run Performance of Malaysian Initial Public Offerings (IPOs): Value and Growth Effects ». Managerial Finance, Vol. 28, N°2, pp. 52-65

Dawson, S M., (1987). « Secondary Stock Market Performance of Initial Public Offers, Hong Kong, Singapore and Malaysia: 1978–1984 ». Journal of Business Finance & Accounting, Vol.4, N° 1, pp. 65-76

Degeorge, F., & Derrien, F. (2001). « Les de terminants de la performance a long terme des introductions en bourse: le cas français ». Banque & Marchés, Vol. 55, pp. 8-18.

Drobetz, et al., (2005). « Long-Term Performance of Initial Public Offerings : The Evidence for Switzerland ». Schmalenbach Business Review, Vol. 57, pp. 253-275.

Finn, F J. & Higham, R. (1988). «The performance of unseasoned new equity issues-cum-stock exchange listings in Australia ».Journal of Banking & Finance, Vol. 12, N° 3, pp. 333-351

Firth, M., (1997). « An analysis of the stock market performance of new issues in New Zealand ». Pacific Basin Finance Journal, Vol. 5, N° 1, pp. 63-85

Gajewski, J, F. & Gresse, C., (2004), « A comparison of trading costs on NSC (Euronext) and SETS (London Stock Exchange) ». Revue bancaire et financière, Vol. 68, N° 3, pp.291-319

Jaskiewicz, et al., (2005). « Long-Run IPO Performance Analysis of German and Spanish Family-Owned Businesses ». Family Business Review, Vol. 18, N° 3, pp. 179-202;

Jelic et al.(2001). «Performance of Malaysian IPOs: Underwriters reputation and management earnings forecasts ». Pacific-Basin Finance Journal, Vol 9, N°, pp. 457-486

Jog, V., (1997). « The climate for Canadian initial public offerings, » In: P. Halpern, eds., Financing growth in Canada (University of Calgary press), pp. 357-401.

Kim, J., I. Krinsky, et J. Lee, 1995. «The After-Market Performance of Initial Public Offerings in Korea». Pacific-Basin Finance Journal, Vol. 3, pp. 429-448.

Kooli, M., & Suret, J.-M. (2004). « The aftermarket performance of initial public offerings in Canada ». Journal of Multinational Financial Management, Vol. 14, N° 1, pp. 47–66.

Lee, PJ., Taylor, SL. and Walter, TS. (1996) « Australian IPO pricing in the short and long run ». Journal of Banking & Finance, Vol. 20, N° 7, pp. 1189-1210

Levis, M., (1993). «The long-run performance of Initial Public Offerings: The U.K. experience 1980-1988». Financial Management, Vol. 22, pp. 28-41.

Ljungqvist, (1997). « Pricing initial public offerings: Further evidence from Germany ».European Economic Review, Vol. 41, N° 7, pp. 1309-1320

Loughran, T. & Ritter, J. R. (1995). « The New Issues Puzzle». The Journal of Finance, Vol. 50, N° 1, pp. 23-51

McGuinness, (1993). « The Post-Listing Return Performance of Unseasoned Issues of Common Stock in Hong Kong ». Journal of Business Finance & Accounting, Vol. 20, N° 2, pp. 167-194

Ritter. (1991). « The long run performance of initial public offerings ». The Journal of Finance, Vol. 46, N°1, pp. 3-27

Shome, D K. & Singh, S. (1995). « Firm Value and External Blockholdings ». Financial Mangement, Vol. 24, N° 4, pp. 3-14

Stern, R L., & Bornstein, P. (1985). « Why New Issues are Lousy Investments » Forbes 136, pp. 152–190.

Stoll, H.R. & Curley, A.J. (1970) « Small Business and the New Issues Market for Equities ». Journal of Financial and Quantitative Analysis, Vol. 5, N° 3, pp. 309-322.

Talbi Alami, F.Z., (2018), « introductions à la bourse de Casablanca : quelle performances », Revue du Contrôle de la Comptabilité et de l'Audit, N° 5, pp. 49-66.

Uhler, H. (1989). « Going Public in the F.R.G. ». Conference paper, A Reappraisal of the Efficiency of Financial Markets pp 369-393

Zahira B. (2018). « Long Run Performance of Initial Public Offerings (IPOs) in Pakistan ». Business and Management Horizons. Vol. 6, No. 2, pp. 95-104