



Disclosure of IPO Proceeds and Survival of Malaysian Listed Companies

Norliza Che-Yahya^(✉) and Siti Sarah Alyasa-Gan

Faculty of Business and Management, Universiti Teknologi MARA, Puncak Alam,
Selangor, Malaysia
norliza9911@uitm.edu.my

Abstract. This study investigates the impact of IPO proceeds utilization disclosure on the survival of 423 Malaysian listed firms from 2000 to 2014. Following the declining trajectory of total listed businesses with active status in the Malaysian market since 2006, this research evaluates the role of IPO proceeds, i.e., the percentage of IPO proceeds and time frame of the application on the post-IPO survival of Malaysian listed companies. By applying Kaplan-Meier (K-M) survival analysis model, this study discovered that 69.03% of companies survive within three years, 59.81% sustain in five years, and 53.18% survive within seven years after their Initial Public Offering (IPO). Further studies show that companies should be able to allocate their IPO proceeds equally to each classification (growth potential, debt repayment, and working capital) for increased survivability and a longer median survival period. Companies with a longer time frame (more than 24 months) utilizing development potential and debt repayment have better survivability and a longer median survival time. In contrast, companies that have used working capital for fewer than 24 months have higher survivability and a longer median survival duration.

Keywords: IPO proceeds · Growth Opportunities · Debt repayment · Working capital · Survival

1 Introduction

An initial public offering (IPO) is the first stage of a company's equity fundraising. It involves the company presenting stock to the general public for the first time [1]. Apart from driving development, going public is one strategy for a company to convincing shareholders of its long-term survival [2]. Survivability will represent a company's capacity to sustain challenging aftermarket conditions, demonstrating their achievement through extended post-IPO survival [3].

Two possible ways of measuring companies' survival are survival rate or survival time [4]. Despite that, analyzing survival circles around the companies' outcome of having to survive for a specified time until an event occurs. Precisely, the companies' survival time initiates from their listing days until they are delisted, acquired, or even fail to fulfil the listing requirements. Accordingly, survival is a direct measure and companies'

assessment for long-term sustainability, offering a clear test of whether the company have ultimately performed to remain publicly listed companies over the long run [5].

To the extent that publicly listed companies can raise continuous capital from their offerings, some may also face difficulties in surviving in the long-run, especially due to the high uncertainty in an IPO market [6]. Surely, how long companies can survive once publicly listed remains uncertain and risky for both issuing companies and investors. Companies that failed to survive longer may be due to the undersubscription of shares, forcing the companies to incur losses. The implication extends even after the public listing. The companies are drowned with high leverage because they failed to raise additional capital during their public life to finance their investments [7]. As a result, investors who desire to acquire a favourable long term investment will be left frustrated from having to incur losses as the companies' value starts to decline, causing potential investors to lose confidence in companies listed in the stock market and discouraging potential investments in the market [8]. Companies' post-IPO performance and survivability may worsen if they are incapable of getting sufficient capital.

Accordingly, this study notices a declining pattern of total listed companies with active status in the Malaysian market since 2006 and only started to incline in 2017 due to the establishment of the LEAP market. Figure 1 shows that the number of Main Market participants with active status has been reducing over the years. According to the "Selection of FTSE Bursa Malaysia KLCI Constituents" section of Bursa Malaysia [9], the benchmark index (i.e., KLCI) of Malaysian stock market performance is dependent upon the quality of the Main market participants. A continuing decline in the number of Main market participants may represent that the stock market is outperforming. As a result, the outperformance may prevent investors from making potential market investments [8].

While there is a considerable amount of literature examining the post-IPO performances of companies post-IPO [1, 10–15], the attention on studies of companies' survival time is growing, especially in the emerging markets [16]. Although companies' survival time seems consistent with the examination of post-IPO performance, the examination of companies' survival time represents an unambiguous companies' performance, estimated from the time element [17]. As opposed to the studies on companies' post-IPO performance that relies on stock returns for a proxy to companies' post-IPO performance at a specified point of time, Shumway [18] states that the advantage of conducting studies using the survival analysis model is that the incorporation of time-varying covariates that change with time increase the accuracy of long-run post-IPO prediction, that is the companies' survival time.

Studies on the survival of companies post-IPO from the developed markets commonly adopt the role of companies' characteristics (company size and age) and issuance characteristics (underwriter reputation, venture capitalist and issuance size) [5, 19–21]. Accordingly, as far as the review of limited literature is concerned, Amor and Kooli [11] and Wyatt [22] are the few studies found to consider the information of IPO proceeds as the determinant of companies' survival. In the Securities Commission of Malaysia (SCM) 9th Revision Prospectus Guidelines (P.G.) Part II Division 1, the application of companies to go for public listing includes requirements for the companies to mandatorily disclose information on the expected amount of IPO proceeds raised during the

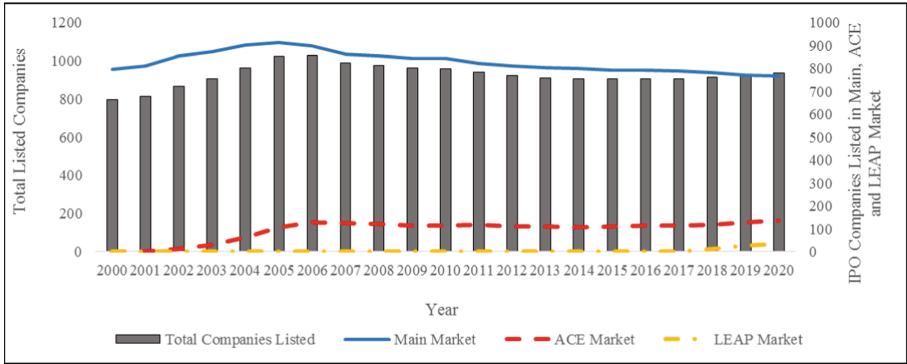


Fig. 1. Listed companies in all three markets of Bursa Malaysia (Main Market, ACE Market and LEAP Market). Source: Bursa Malaysia website [9].

exercise of IPO. They are the disclosure of both the proportion of proceeds for utilization and the time frame of the proceeds to be fully utilized for several categories: growth opportunities, debt repayment and working capital. The mandatory requirement's objective is to protect investors' interests through information transparency and to ensure a stable stock market [23].

Companies' long survival periods can have beneficial consequences because, as long as they are listed, they can generate capital publicly and finance investment options with high positive net present value to create optimal long-term performance [24]. The favorable consequences of a company's survival period extend to other entities, such as investors, since surviving longer in the aftermarket will shape a positive sentiment from investors, indicating security for shareholders to execute their investment strategies for long-term capital growth [3]. The survival time of companies is also essential for the government to measure the effectiveness of capital market guidelines [25]. For instance, Bursa Malaysia has designed a framework for the public listed companies with a provision mandating that companies having financial difficulties or insufficient level of operations be under Practice Note 17 (PN17), rule 8.04 of Main Market listing and Guidance Note 3 (GN3), rule 8.04 of ACE Market listing. This framework is a platform that can extend the companies' survival time in the long-run [6].

2 Methods

2.1 Sample Selection

This study proposed to investigate all IPO companies listed on the ACE and Main Market from 2000 and 31 August 2014. There were 527 companies in total. After removing companies offered by Real Estate Investment Trusts (REITs), financial institutions, and insurance companies due to differences in financial statement format and legal framework, as well as companies with missing values and outliers (a total of 104 companies excluded), the final sample is 423 companies.

Table 1. Measurements of variables in this study

No.	Variables	Notation	Definition	Measurements
1.	Companies Survival Time	ST	Time-to-Survive (months)	$= Ln_i(t_{1,i} - t_{0,i})$
			Binary Variable (“1” or “0”)	= IF, Censored = “1” IF, Non-censored = “0”
2.	Proportion for Growth Opportunities	POPG	IPO Proceeds for Growth Activities (%)	$= \frac{GROPP_i}{TOTPRO_i} \times 100$
3.	Proportion for Debt Repayment	POPD	IPO Proceeds for Relieving, Reducing or Retiring Indebtedness (%)	$= \frac{DERE_i}{TOTPRO_i} \times 100$
4.	Proportion for Working Capital	POPW	IPO Proceeds for Working Capital and Daily Activities (%)	$= \frac{WOCA_i}{TOTPRO_i} \times 100$
5.	Time Frame for Growth Opportunities	TFG	Growth Opportunities Utilization (months)	$= TF_{g,i}$
6.	Time Frame for Debt Repayment	TFD	Debt Repayment Utilization (months)	$= TF_{d,i}$
7.	Time Frame for Working Capital	TFW	Working Capital Utilization (months)	$= TF_{w,i}$

2.2 Measurement of Variables

Company survival period is the dependent variable in this study. In this study, surviving companies are defined as companies that are actively trading and have achieved their high-performance post-IPO. Non-surviving companies are those that have encountered challenges (e.g. failure to meet listing criteria) in their journey as listed companies. According to prior findings [19, 26–28], the companies’ survival time is the duration from the companies’ listing date till the end time that the companies have survived, expressed in months. This study required not only the companies’ time-to-survive but also the binary variable in order to measure their survival time (Table 1).

2.3 Methodology

The Kaplan-Meier (K-M) model is used in this research to evaluate companies’ survival ability non-parametrically (non-normality of data). Following Ahmad and Jelic [29] and Baluja [3], this research investigates the companies’ survival rate in an overall outlook (full sample) with information on IPO proceeds stratified. For a seven-year observation period, the K-M survival rates and median survival time are stratified for each IPO proceeds category (POPG, POPD, POPW, TFG, TFD, and TFW). This study recognizes

that the K-M model is a favored test for determining company survival time as it implies no assumptions upon normality assumption. The K-M model is defined by Eq. 1.

$$S(t_i) = S(t_{i-1}) \left(\frac{n_i - d_i}{n_i} \right) \quad (1)$$

3 Findings and Discussion

3.1 Kaplan-Meier Survival

Using the K-M model, this study measures the companies' survival rates and median survival time (ST) from 2000 to 2014, comparing the complete sample (Panel A), the share of IPO proceeds (Panel B), and the time frame of proceeds utilization (Panel C). The survival rates differ significantly across panels. Table 2 presents the median survival time (ST) in months.

In the current study, as Espenlaub et al. [19] and Ahmad and Jelic [29], uses 50% for the median ST to determine how long (in months) the companies fall below 50% post-IPO. Any value in parentheses in Panel A represents the minimum ST, i.e., the time remaining from the IPO companies' listing year to the end of this study's observation period (August).

Based on the Panel A of Table 2, out of 423 companies, 81.80% of companies survived first-year post-IPO. Around 18.20% of companies struggle to survive in their first year after going public. The survival ratio of companies falls to 69.03% from the initial year of listing in the third year post-IPO. The fifth-year post-IPO survival rate is 59.81%, and the seventh-year post-IPO survival rate is 53.18%. According to the median survival time (median ST), it takes 101 months for half of the companies in the sample (50%) to be non-surviving. This study uncovers that the survival rates reported in this study are lower than those reported in previous research [20, 29, 30]. This investigation discovers that the survival rates reported in this study are lower than those reported in other studies [20, 29, 30]. This study also discovered that business survival rates are lower than the values in recent Malaysian market studies by Ahmad-Zaluki and Badru [31]; Shari [6] during a seven-year period. To justify, this study differs from past studies in defining surviving companies, i.e., survivor companies are defined in this study as actively traded companies at their optimal efficiency, whereas previous studies defined surviving companies as continually traded companies regardless of performance. As a consequence, this study postulates, that it is essential to consider that the survival of companies reported in all studies should correspond to each study's criteria of surviving companies.

Panel B reports the K-M model stratified by the proportion of IPO proceeds categories and the time frame of proceeds utilization categories. Firstly, Panel B exhibits that the survival rate of companies with POPG below 50% is consistently higher than companies with POPG above 50% throughout the observation period, excluding the second year post-IPO. This study reports that the companies with higher POPG experience greater difficulties maintaining listed. In other words, companies with the main objective to grow and expand their business are less likely to survive longer post-IPO. Consequently,

Table 2. Kaplan-Meier survival: Full sample and stratification of IPO proceeds categories

Categories	No. of Companies	Cumulative Survival Rates (%)							ST Median (50%)
		Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	
Panel A: Full Sample									
Total	423	81.80	74.23	69.03	62.88	59.81	56.26	53.18	101
Panel B: Proportions of IPO Proceeds									
Growth Opportunities (%)									
(0–50)	248	83.06	73.79	71.37	64.11	60.89	58.06	55.24	104
(51–100)	175	80.00	74.86	65.71	61.14	58.29	53.71	50.27	90
Debt Repayment (%)									
(0–50)	374	81.28	74.06	68.45	62.83	59.63	56.42	53.73	104
(51–100)	49	85.71	75.51	73.47	63.27	61.22	55.10	48.98	82
Working Capital (%)									
(0–50)	308	81.17	76.30	70.13	64.61	61.69	57.79	54.86	106
(51–100)	115	83.48	68.70	66.09	58.26	54.78	52.17	48.70	81
Panel C: Time Frame of Proceeds Utilization									
Growth Opportunities (months)									
(0–12)	182	86.26	77.47	73.63	65.93	62.09	58.24	54.40	102
(13–24)	168	75.60	70.24	64.88	57.74	54.76	52.38	49.99	81
(>24)	73	84.93	75.34	67.12	67.12	65.75	60.27	57.50	151
Debt Repayment (months)									
(0–12)	403	81.64	74.19	68.73	62.53	59.31	55.83	52.84	102
(13–24)	17	82.35	76.47	76.47	70.59	70.59	64.71	58.82	95
(>24)	3	100.00	66.67	66.67	66.67	66.67	66.67	66.67	201
Working Capital (months)									
(0–12)	293	80.89	74.74	68.60	62.80	59.39	55.97	53.23	101
(13–24)	101	82.18	72.28	71.29	63.37	61.39	58.42	54.46	107
(>24)	29	89.66	75.86	65.52	62.07	58.62	51.72	48.03	83

it takes 14 months lesser (median ST) for half of the companies with POPG above 50% to face difficulties as listed companies compared to those with no or minimal objective to grow. Thus, it is identifiable that most companies (248 compared to 175 companies) have POPG below 50% upon listing.

Secondly, Panel B shows that the survival rate of companies above 50% of POPD is moderately higher than companies below 50% of POPD in the first five years post-IPO (85.71% to 61.22%, and 81.28% to 59.63%). The remaining two years shows that the survival rate of companies above 50% of POPD (55.10% to 48.98%) drops lower than

companies below 50% of POPD (56.42% to 53.73%). This study finds that companies with high POPD usually sustain in the early years of listing but face difficulties in the long-run when their debt starts to pay off as a mean to take advantage by accessing further financing in the future [31]. As a result, the companies suffer from excess debt and potential business failure. To overcome a shorter survival time, most companies listed in the Malaysian market (374 out of 423 companies) allocate a lower POPD (below 50%), resulting in the median ST being longer by 22 months.

Thirdly, Panel B also shows that companies above 50% of POPW have a higher survival rate in the first year of listing by 2.31% compared to companies below 50% of POPW. Companies with less than 50% of POPW have a greater survival rate from the second to the seventh year after IPO (76.30% to 54.86% and 68.70% to 48.70%). Since working capital is IPO proceeds utilized for unspecified activities [23], companies with higher POPW cannot create value to sustain in the long-run from an unclear future direction. Statistically, companies that prioritize to POPW survive a shorter time by 25 months. Similar to POPG and POPD of Panel A, this study reveals that companies limit their POPW to below 50% (308 companies compared to 115 companies).

Panel C of Table 2 reports companies' survival rate and survival time by stratifying the time frame of proceeds utilization categories. For the first three years post-IPO, Panel C exhibits that the survival rate of companies with TFG in the first 12 months is continuously higher (86.26% to 73.63%) than companies with TFG longer than 12 months (84.93% to 67.12%). However, the remaining four years of observation exhibit those companies with TFG longer than 24 months (67.12% to 57.50%) can survive better than those with TFG lower than 24 months (57.74% to 49.99%). Although most companies (182 companies) choose to allocate a shorter TFG (0 month to 12 months), 73 companies with TFG longer than 24 months have a longer median ST by 49 months. While companies that aim to fulfill investors' short-term expectations and desire of a short return struggle and require more time for profit generation and sustainability [32], companies with a longer time frame to grow have the benefit of strategizing and enhance their value within the seven-years post-IPO.

Next, this study discovered that in the first year of TFD listing, none of the companies that have been listed for more than 24 months experience issues in preservation, with a 100% survival rate. On the other hand, 403 companies with a shorter TFD (from 0 to 24 months) show an almost 20% decrement in the first year post-IPO survival rate. Although there is a considerable drop experienced by the companies with TFD longer than 24 months (33.33%) in the second year, the remaining 66.67% can survive seven years post-IPO (2 companies out of 3 companies). Consequently, companies with TFD longer than 24 months show a higher survival rate on the seventh year of listing (66.67%) than companies with TFD shorter than 24 months (52.84% and 58.82%). Similar to the TFG, there is a substantial difference of companies' median ST for companies with TFD longer than 24 months, at 201 months. This study found that companies with an extended maturity term debt survive longer. According to Adachi-Sato and Vithessonthi [33], companies with shorter debt repayment terms are commonly associated with higher corporate risk-taking from high-risk investments. Consequently, if the debt matures before the investments' execution, the companies cannot obtain suboptimal investment returns, shortening their survival time post-IPO.

Panel C also displays the survival rates and survival times of companies based on their TFW. Companies with TFW greater than 24 months have the highest survival rate in the first two years of listing, at 89.66% in the first year and 75.86% in the second year. Companies with 13 months to 24 months of TFW reported the highest survival rate until the end of the observation period, at 54.46%, in the beginning of the third year after IPO. At the end of seven years post-IPO, the lowest survival rate is at 48.03%, possessed by companies with longer than 24 months of TFW. Concurrently, the companies with TFW within 13 months to 24 months have the longest median ST, at 107 months, while companies with TFW of more than 24 months have the shortest median ST, at 83 months. Since working capital is commonly used for general corporate purposes [34], it is preferable if the TFW is shorter to avoid uncertainty on the company's future direction. Parallel to Aktas et al. [35], decreasing the time of utilizing working capital increases companies' financial flexibility in the short-run and surge adequate cash flow for companies to sustain post-IPO. Accordingly, the 394 companies (293 and 101) with a shorter TFW can survive longer post-IPO.

4 Conclusion

To conclude, the proportion of IPO proceeds below 50% for all categories result to companies surviving better and longer post-IPO. A longer companies' median ST with the proportion of IPO proceeds below 50% for all categories is also observable than those above 50%. This indicates that companies in the Malaysian market strategically allocated their IPO proceeds for any category to be below 50% as a way to survive longer post-IPO. The results show that companies with POPG have the highest survival rate and median ST, while companies with POPD have the lowest survival rate and median ST. This study also concludes that companies with TFG and TFD for more than 24 months exhibit better survivability (longest median ST) in each category. In comparison, companies with less than 24 months TFW have better survivability at the end of the observation period. This study's results align with the objective of Bursa Malaysia [36] in promoting IPO as a platform for companies to grow their capital and business to sustain longer in the capital market.

According to the study findings, company information disclosure is essential to guarantee that companies survive better and longer post-IPO, particularly in the Malaysian market. The results of the study help investors make informed investing decisions. Similarly, companies should strategically allocate IPO proceeds to create benefits and reduce financing risk in order to survive for a longer period of time.

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