

Risk Management Strategy in IPO Activity

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ABSTRACT

While more firms choose to go public, more risks are involved. To reduce accompanied risks, we review the theory, evidence, and correspondence strategies on different risks of IPO activity: (1) IPO failure risk, (2) litigation risk, and (3) systematic risk. Our perspectives are threefold: First, we evaluate the life cycle theory and market time theory of pre-IPO activity. We believe that going public at the right timing and with reasonable market forecast will reduce failure risk. Second, the potential cost of litigation risk is high, and the risk is related to underperformance and misstatement. Third, market factors are the determinants of risk levels. We conclude that litigation risk is in fact rather threatening due to the nature of exposure and transparency.

Keywords: Review, Initial Public Offerings, Risks, Litigation.

1. INTRODUCTION

From the past to today's market development, the number of public companies continues to grow, and the number of initial public offerings changes every year. But IPO numbers have gone from consistently high initial gross returns to underperforming experienced companies with the same book-to-market ratio by an average of 5.1%, suggesting issuance activity, underpricing and long-term underperformance. The correct assessment and management of IPO risk as a source of financing is an extremely important step to seek greater return potential and determine whether the company can develop along the right track. Although market regulation is playing an increasingly important role, the requirements for management are becoming more stringent, or the expectation of considerable profits rather than attention. But in the public eye, these are all trade-offs, and risk management not only prevents actual losses, but also involves relative losses. Therefore, this paper seeks to identify different kinds of possible risks and formulate relevant coping strategies to reduce the risks in IPO activities.

To sum up, this paper will analyze risk management strategies for different IPO activities in depth. The remainder of the paper will be organized as follows. Section II mainly discusses the risk of listing failure and

two main strategies: life cycle theory and market timing theory. Section III will explore litigation risks, such as the risk of underperformance, misrepresentation, and potential costs. The last section will focus on systemic risk, which is one of the inevitable risks.

2. IPO FAILURE RISK

This part mainly discusses the risks that a firm will face before an IPO is listed and what measures are taken to predict and plan in advance through the changing trend of IPO activities, so as reducing the hidden risks of different degrees. The size of an IPO reflects investors' interest and appetite for new companies. The risk of IPO failure is important to both investors and employees, because the failure rate of IPOs has risen sharply over time, and the probability of new listings has fallen from 61% in the early 1970s to 37% in the 1990s [1]. There is also a paucity of information related to IPO companies, adding a lot of uncertainty in terms of valuation [2]. Therefore, all these factors suggest that founders need to think about the potential failure of the IPO and how to deal with and change in the future.

2.1. Life Cycle Theory

The first important economic theory is the life cycle theory, which describes a person's spending and saving

habits over a lifetime. The theory states that people plan their spending and consider future income throughout their lives. So, borrowing when income is low and saving when income is high leads to a relatively stable level of consumption. For IPO activity, selecting in which stage the company listed is one of the problems discussed [3]. Then, they point out that IPO allows more dispersed ownership and establish a model to illustrate that the company can through to the private venture capitalists selling shares to small investors to sell the IPO to raise external finance. However, in pre-IPO, companies that already have competitors or are comparable will have a better chance of getting an IPO, while private companies, especially unicorns, will face difficulties. In the early life cycle, private financing happens to occur in risky industries that are considered cheap and viable to develop. In today's technologically advanced modern industries, opportunities for rapid change and continuous innovation require early-stage firms to gain an edge by finding the best opportunities. Maksimovic and Pichler (2001) argue that higher open prices attract product competition, and that early players often rely on technology and changes in user needs to get ahead [4]. The risks faced by listed companies are not only excellent listing timing and high listing price, but also depend on the competitive environment in the industry. Early-stage companies may gain an edge in the product market, but this is not indicative of future success. The risk is that if it does not have a successful technology, it may then be squeezed out by better competitors.

2.2. Market Timing Theory

Another theory is market timing, which refers to the decision to move investment money into or out of the market based on forecasts. If investors can use this theory to predict the market, they can turn the market into profits and avoid certain risks. Baker and Wurgler (2002) later put forward a "market timing theory of capital structure". The theory states that the current capital structure is the cumulative result of past attempts to time the stock market [5]. Market timing means issuing new shares when companies are thought to be overvalued and buying back their own shares when they are deemed undervalued. In practice, Chief Financial Officers (CFOs) seem to be trying to actively participate in market timing in their funding decisions. In the survey conducted by Graham and Harvey (2001), two-thirds of company executives consider "the degree to which the stock is overvalued or undervalued" as an important consideration [6]. According to the market timing theory, when the cost of equity is low, enterprises prefer external equity, otherwise, they prefer debt. Under the condition of financing demand, when the relative cost of equity is low, the enterprise will issue equity; If not, it will issue bonds. Literature by Lemmon and Zender (2002) shows that some small growth enterprises are more constrained

by debt, so they must provide funds for their future growth through external equity [7].

The stock market has two options for timing. The first type is the dynamic version proposed by Myers and Majluf (1984), which discuss rational managers and investors and the variability of adverse selection costs [8]. Korajczyk et al. (1991) found that companies wanted to announce equity issuance and issue equity directly after the information was released to reduce information asymmetry [9]. According to the findings of Baker and Wurgler (2002), the external financial weighted average of the historical market cap to book value ratio is negatively correlated with the current market leverage ratio, which is also used as evidence to explain the market timing theory [5]. The second type of stock market timing involves irrational investors or managers and time-varying mispricing (the perception of mispricing). When managers choose to issue stocks, the cost of stocks is unreasonable bottom; Or buy back shares when managers think they are unreasonably expensive. Pagano, Panetta, and Zingales (1998) pointed out that the market to book ratio of the industry is the most important factor to determine whether Italian companies can go public because this ratio is representative of mispricing and growth opportunities [10]. In addition, Lowry (2003) notes that the number of successful IPOs also depends to some extent on the agency of investor sentiment [11].

2.3. Evidence

In the market, the actual activity risk of IPO is difficult to test theoretically. That is because IPOs do not always go according to plan, no matter what happens to the company or the market before it goes public. And there is a certain one-sidedness that researchers usually only focus on listed companies but ignore the changes of private companies. If a company invests in a late IPO company six months before the IPO, that company's IPO is taking a lot of risks. Companies that invest longer in advance, say 12 to 24 months, have more leeway and protection against first-day volatility. Staying away from private shares that are too close to the IPO activity reduces some of the risks. In addition, Lowry and Schwet (2002) conducted a more detailed study in this respect and found that high first-day IPO returns would advance the IPO activity by nearly 6 months [12]. However, high first-day IPO returns would also be accompanied by high underpricing, depending on the practices of underwriters. Underwriters encourage more companies to go public when the public valuation is higher than expected but discourage companies from filing when the public valuation is lower than expected. Through data research, Pagano, Panetta, and Zingales (1998) found that large-sized companies and industrial companies with a higher ratio of market value and book part-time are more likely to be listed

[10]. Therefore, the above factors will have a certain impact on the company before listing.

2.4. Summary

This section mainly discusses two important theories: life cycle theory and market timing theory. In the first theoretical discussion, according to the nature of IPO activities, it discusses the best time to go public, what financing means to take, and how to take measures to gain advantages and competitive opportunities when early companies have certain competitors in the market. Therefore, it is concluded that while choosing the right stage of listing, it is also necessary to adhere to innovation and change, which will establish a solid foundation for the future success of the company. The second part, based on the market timing theory, discusses how companies can predict the market and choose the right time to issue stocks. An important consideration for corporate executives is to issue new shares when they are thought to be overvalued and take back shares when they are thought to be undervalued. From the perspective of the company, when the cost of equity is low, it may be more suitable to choose external equity for financing, and more development funds can be obtained by issuing equity. In addition, market timing theory is divided into two types of timing. The first is rational managers and investors, and the second is irrational investors or managers and time-varying mispricing, which all help to predict market decisions. But the success of an enterprise listed are involved in number of different factors, and the rapidly changing market, merely the theoretical support of concerned is not fully developed strategy. Thus, the problem tendency of the future search direction needs for more quantitative data collection, observation, comparison, and combining theoretical knowledge analysis to obtain more comprehensive conclusion.

3. LITIGATION RISK

This part mainly discusses the litigation risks during and post-IPO due to the public exposure at this stage. The IPO process provides firms the opportunity to raise additional capital for further development and gain publicity for boosting public profile. However, firms also become vulnerable during this stage. The litigation risk increases as the firm go public because the nature of IPOs is risky and volatile. Therefore, the lawsuits against IPO firms had increased. Since 2013, lawsuits against IPOs had doubled as the number of IPOs soared. Unprofitable IPO firms and firms with high valuations become the major targets of lawsuits. Three major litigations against IPOs are (1) securities class action (2) stock-drop lawsuit and (3) patent lawsuit. Some IPOs are facing litigation right after the IPO completion [13]. It is critical for founders to pay close attention to law and regulation and avoid potential litigation risks. Two risks discussed in

this section are (1) risk of underperformance and (2) risk of misrepresentation.

3.1. Risk of Underperformance

According to the Employee Retirement Income Security Act of 1974, IPO firms have high litigation risk as stock prices drop below their offering prices. According to the Stanford Securities Analytic Database cited by LaCroix, Large stock drop and stock drop of a large firm are more likely to lead to lawsuits. Large firms have fewer dramatic price changes. 0%-10% of a stock drop of a large firm can lead to lawsuits because the share price is relatively high, and the losses are much more outstanding in terms of dollar value. Small and new firm tends to have more stock drop. 50% of the lawsuits against small and new firms are due to the stock drop of more than 20% [14]. For example, Lyft, a ride-sharing company was hit by lawsuits right after it entered the public market. The frequent stock-drop lawsuits are accounted for the high litigation risk of IPOs. Underpricing is the practice of IPO firms pricing their shares below their value in the stock market. Litigation Risk Hypothesis points out that stock issuers and investment banks lower offer prices to reduce litigation risk. IPOs use underpricing as insurance to help avoid future lawsuits [15]. Evidence showed that underpricing is a strategy for IPO firms to lower the litigation risks. By setting a lower price than the real stock value, provides the opportunity for IPO firms to gain more capital at more desirable rates [16]. According to Rudden (2021), the average first-day return of IPOs is 36%. Hence, the potential litigation risks reduce because of the good performance [17].

3.2. Risk of Misrepresentation

A class action allows more than one plaintiff to file and prosecute a lawsuit against a bigger party. Instead of every plaintiff filing an individual lawsuit, the plaintiffs can file one class action and have one or few attorneys to lead this action. According to the Securities Act of 1933, investors have the right to file a lawsuit toward IPOs with misstatement in the prospectus or other false statements that mislead investors [18]. A proposed class action in 2018 against Nio. Inc accused the CEO and CFO of misrepresentation. The electronic car maker, Nio. Inc had announced to their shareholders that they would develop their own manufacture facility and the deduction of government subsidy has no effect on Nio's business. However, the lawsuit alleged that the share price of Nio. Inc had been artificially inflated due to this misrepresentation. According to the fourth quarter of Nio's earnings report, Nio. Inc admitted that their own manufacture facility plan was terminated, and the delivery of the electronic cars was slackened because of the deduction of government subsidy. Nio's share price had dropped 30% upon the news release. The plaintiffs

alleged that Nio's false statements hurt the interests of shareholders [19]. This also refers to a stock-drop lawsuit. In 2019, Lyft entered the public market, and just a few weeks after the entrance, two class action lawsuits accused that Lyft exaggerated about its market share in its prospectus during the IPO process and additionally concealed plan of recalling bikes [20]. These misrepresentations attract the plaintiffs' lawyers and leave uncertainty for the shareholders. Ball and Shivakumar (2008) suggested that litigation risk is correlated with the high financial report quality. According to their sample of IPOs and public firms, IPOs have higher financial report quality in their early stages. 109 out of 393 UK IPO firms had restated their prospectus and financial statement. The most remarkable adjustment is the write-downs of intangible assets of retain earnings due to the high litigation risk and regulatory risk of IPO firms. It implies that an IPO's litigation risk is inversely proportional to its quality of the financial report [21].

3.3. Potential Costs

The potential litigation costs are high. Lowry and Shu (2002) analyzed that settlement payment is a proverbial cost of IPO-related litigation. Following their investigation, settlement payments are about \$3.3 million on average, and depending on the cases, the amount of settlement varies [16]. Most litigation risk costs are intangible and unmeasurable. For example, public relation spending for any negative news that hurt the reputation and public image; counsel fee for the lawsuits; and opportunity cost of time dealing with the lawsuits. One of the largest IPOs – Facebook, also faced a class action in 2013 and settled with a \$35 million payment [22]. Therefore, it is crucial for IPO firms to reduce the likability of entangling in lawsuits.

3.4. Summary

This section mainly discusses two aspects: risk of underperformance and risk of misrepresentation. In the first part, due to the volatile nature of the IPO firms, there is a high litigation risk. The securities act allows a lawsuit against IPO firms when the price drop below the offer price. Underperformance hurt the interests of shareholders, and it became one of the major causes of IPO lawsuits. Underpricing is used as an issuance to mitigate the litigation risk. By lowering the offer price, underpricing bolsters the initial return, and reduces the risk of a stock-drop lawsuit. In the second part, substantial lawsuits or securities class sections against IPO firms were caused by misrepresentation in the prospectus or financial report. The false statements will mislead investors and harm shareholders' interests. Evidence shows that high-quality financial report is associated with litigation risk reduction. Therefore, ensuring true and correct statements is essential in

preventing unnecessary lawsuits and their potential costs. Since the litigation risk is unmeasurable, it is untoward to construct and run quantitative experiment among this subject. Meanwhile, the regulations constantly updated and modified, the level of litigation risk and regulatory risk are ever-changing. Therefore, it is critical to take litigation risk into account and fully understand the securities regulation to prevent lawsuit and its potential costs, including monetary loss and damage to reputation.

4. SYSTEMATIC RISK

IPOs, as discussed earlier, are subject to different risks. For appropriate management, it is necessary to classify the risks. Some are within the control of the management, in that they can be avoided or minimized by diversification. Threats in this category are referred to as unsystematic risks. Some of the risks are beyond the control of the company and cannot be resolved by diversification. They are not specific to a particular firm. Rather, they affect all stocks in the market in the same way. These are often known as systematic risks. It is important to note that the movement of the stock market is often unpredictable. This is due to changes in interest, foreign exchange, and inflation rates. Other factors include civil unrest and recessions [23].

Despite systematic risks affecting the market in general, it is possible for them to be identified and minimized accordingly. Experts in finance have, over the years, provided various tools to help with the management of systematic risks. The process begins with a common procedure of calculating the beta. In this case, the analysts measure the variation in return on a particular asset or stock over some time and compared it to the market values. This is normally possible by examining historical records. The result of the calculation is the beta coefficient. This construct indicates the extent to which the returns on a stock are volatile. A high beta coefficient indicates extreme volatility. The opposite is true when the coefficient is low. The evaluation is conducted using acceptable statistical and mathematical formulas. The beta coefficient is used to assess the risk contribution of a particular stock to a portfolio. Thus, an investor only needs to examine the volatility of the IPO stock so as to determine its risks and make a decision that will minimize threats and increase returns. When having a portfolio, the stock with the highest beta coefficient should be avoided [23].

4.1. Determinants

Aissia and Hellara examined the level of systematic risk in 254 French IPOs [22]. The study occurred between 2006-2016 [24]. The researchers focused on the relationship between IPO first-day returns, equity risk, and corporate leverage. They further discovered that estimated beta is negatively associated with leverage

ratio, and the interaction of equity risk and corporate leverage is negatively correlated to IPO first-day returns [24]. The results of the study have a high level of credibility for several reasons. First, the researchers preferred a moderate sample size (254). The decision was effective since the investigation involved the performance of a quantitative analysis. Research experts generally prefer a large sample size because it increases the representation of the target population. Moreover, the study was conducted over a long period (10 years). In this regard, it is considered to be longitudinal research. The advantage is that it is effective in revealing the causative relationship between the variables of the study.

Based on the information above, it is evident that the macroeconomic factors present in the market significantly determine the risk level of IPOs. According to Beaulieu and Mrissa Bouden, businesses do not operate in isolation [25]. The authors establish that there are several factors that have a significant influence on the performance of the firm. These include prevailing trends, changes in regulations, technological innovations, and many others. These factors consequentially contribute to systematic risks.

Systematic risks also increase with corporate leverage. The problem is expounded when the majority of the company's assets are funded by liabilities. The scenario creates a negative perception from the investors. This is true for stocks of any company. High leverage also means that the equity risk will rise. This further disadvantages current shareholders [26].

4.2. Risk Management Strategies

There are other alternatives through which systematic risks can be managed. An example is purchasing assets or stocks with uncorrelated returns, in that the earnings of the items in the portfolio should not be determined by the same factors [23]. In this regard, losses in one class of stock can be offset by gains in another. Additionally, systematic risks can be reduced by diversification into unrelated stock. This normally involves the application of derivatives, namely options and futures contracts. In this technique, the investor takes an opposite stand against the same investment. The purpose of the technique is to offset gains and losses in case microeconomic conditions do not behave as expected [27].

Insurance companies can devise innovative coverage for IPO systematic risks, especially those involving regulations. The problem with legal suits is that they are unpredictable. But insurance companies can use the services of experienced and highly competent commercial lawyers to conduct a thorough evaluation as well as create a fair premium program [28].

4.3. Summary

Systematic risk captures an entire market and the threats they expose to IPOs. While it is hard to predict sometimes, hard to control, it is important to acknowledge their existence and how to mitigate their effects on an IPO. The management of the systematic risks, according to the study, is majorly based on financial tools provided by experts to help identify and mitigate such risks. The financial tools calculate the beta coefficients used to determine the volatility rate, hence identifying the systematic risks through the stock prices and market trends. The established information in this section determines several macroeconomic factors that lead up to influence on systematic risks. The management of such macroeconomic factors might include the insurance covers devised specifically for IPOs and the purchasing of stock of uncorrelated items which minimizes the risk against specific stock held by an institution. Overly, the investigation into the systematic risks observes the occurrences of such risks, how to identify and mitigate them among IPOs using specific financial tools such as the beta coefficient, and the management approaches for the systematic risks once they occur.

The limitation for this study is the lack of case study analysis to appropriate facts provided by the identified risks. The analysis using cases would reliably communicate how these risks occur and their effects to the IPO. Future studies should engage in critical demonstration of stock history and their effects on the decision to achieve public investment. This is data reliable for understanding how the market influences decisions for brands to achieve LPO.

5. CONCLUSION

The risks that are threats to success of IPOs include IPO failure, litigation, and systematic risks. IPO failure and systematic risks are based on the IPO and how it is created and the entire market. While these risks are of consideration, they have limited intensity to occur with prior research on the market and proper scheduling of events leading to the IPO. While decoding the intensity of the risks, this study identifies litigation risk as the greatest threat to successful IPOs. This is especially true because initial public offerings (IPOs) draw increased attention and scrutiny. In this regard, it is clear that management should prioritize legal risks over financial and other sorts of risks that a company faces when launching an IPO. Legal professionals with experience in the procedure should be hired by the company. It should seek advice from companies that have previously gone through an IPO. The company must do a thorough self-evaluation to verify that there are few, if any, gaps through which costly litigation might be brought against it after the IPO.

Today, there are already practices invented to minimize IPO risks. One of the most commonly used techniques is underpricing. The strategy is unique and, thus, has a special value. It is compared to the idea of the famous Chinese philosopher on the art of war. He suggests that to win in a battle, one must portray themselves to the enemy to be weak when they are at their peak of strength. In this way, it is easy to get rivals or challengers by surprise. The method is also quite similar to fundamental budgeting principle in that it is advised that the organizations make provision in advance for potential future expenses. On the other side, while planning, the revenues should not be accounted until it is probable that cashflow will flow to the entity. The most generally used technique for measuring and evaluating systematic risks appears to be calculating the beta coefficient.

Experts in the field need to conduct more research on risk management strategies for IPOs. The approach is likely to produce some valuable and effective ideas. The financial market is dynamic. Managements should not wait to react to events or challenges but rather take a proactive approach towards providing amicable solutions. Authorities need to recognize the benefits that IPOs bring to the economy in terms of taxes, employment, and innovation. Thereafter, they should make favorable laws. In particular, governments, through regulations, need to proactively engage in activities that protect small firms that undergo an IPO from costly litigation.

AUTHORS' CONTRIBUTIONS

X. Z conceived and contributed to the Section [2] IPO Failure Risk. W. Z conceived and contributed to Section [3] litigation risk and wrote the manuscript of all inputs from authors. C. B conceived and contributed to the Section [4] systematic risk.

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