บริษัทที่มีข้อจำกัดทางการเงินสามารถเข้าถึงแหล่งเงินทุนจากภายนอกหรือไม่? : ผลกระทบของการตั้งราคาหลักทรัพย์ผิดพลาดต่อการตัดสินใจทางด้านการจัดหาเงินและการลงทุนขององค์กร

Does Financially Constrained Firms have an Access to External Finance? : The Effect of Mispricing on Corporate Financing and Investing Decisions

ดร.วัฒนี ศิริทัตสวัสดิ์
ผู้ช่วยศาสตราจารย์ประจำภาควิชาการบัญชี
คณะพาณิชยศาสตร์และการบัญชี มหาวิทยาลัยธรรมศาสตร์
Email: wattanee@tbs.tu.ac.th

Wattanee Siritatsawas, PhD
Assistant Professor of Accounting Department
Thammasat Business School, Thammasat University
Email: wattanee@tbs.tu.ac.th

บริษัทที่มีข้อจำกัดทางการเงินสามารถเข้าถึงแหล่งเงินทุนจากภายนอกหรือไม่? : ผลกระทบของการตั้งราคาหลักทรัพย์ผิดพลาดต่อการตัดสินใจทางด้านการจัดหาเงินและการลงทุนขององค์กร

ดร.วัฒนี ศิริทัตสวัสดิ์
ผู้ช่วยศาสตราจารย์ประจำภาควิชาการบัญชี
คณะพาณิชยศาสตร์และการบัญชี มหาวิทยาลัยธรรมศาสตร์
Email: wattanee@tbs.tu.ac.th

วันที่ได้รับบทความต้นฉบับ: 12 มกราคม 2564
วันที่แก้ไขปรับปรุงบทความ: 12 กรกฎาคม 2564
วันที่ตอบรับตีพิมพ์บทความ: 15 กรกฎาคม 2564

บทคัดย่อ

บทความนี้มีวัตถุประสงค์ เพื่อศึกษาผลกระทบของการประเมินมูลค่าหลักทรัพย์ผิดพลาดต่อการตัดสินใจขององค์กร โดยเฉพาะการตัดสินใจทางด้านการจัดหาเงินจากแหล่งภายนอกและการลงทุนขององค์กร การประเมินมูลค่าหลักทรัพย์ผิดพลาดเกิดขึ้นเมื่อราคาของหลักทรัพย์สูงกว่าหรือต่ำกว่ามูลค่าที่แท้จริง ความแตกต่างของราคาเกิดขึ้นจากการประเมินราคาที่ผิดพลาดของนักลงทุนซึ่งได้รับข้อมูลของหลักทรัพย์ไม่เพียงพอ วรรณกรรมที่เกี่ยวข้องได้มีการศึกษาว่าการประเมินมูลค่าหลักทรัพย์ผิดพลาดส่งผลกระทบต่อกิจกรรมทางธุรกิจ โดยเฉพาะทางด้านการลงทุนและทางจัดหาเงินจากแหล่งภายนอกของบริษัท นอกจากนี้บทความนี้ยังอภิปรายว่าการประเมินมูลค่าหลักทรัพย์ผิดพลาดส่งผลกระทบเชิงบวกต่อบริษัทที่มีข้อจำกัดทางการเงินอย่างไร เนื่องจากบริษัทที่มีข้อจำกัดทางการเงินต้องเผชิญกับต้นทุนในการทำธุรกรรมและต้นทุนตัวแทนที่สูงกว่าบริษัทที่ไม่มีข้อจำกัดทางการเงินในการระดมทุนในตลาดหลักทรัพย์ บทความนี้จึงได้อภิปรายถึงโอกาสที่ผู้บริหารของบริษัทที่มีข้อจำกัดทางการเงินในการใช้บัญชีคงค้างเพื่อนำไปสู่การตัดสินใจในการลงทุนในหลักทรัพย์ของบริษัทดังกล่าวจากนักลงทุน

คำสำคัญ: *การประเมินมูลค่าหลักทรัพย์ผิดพลาด บริษัทที่มีข้อจำกัดทางการเงิน บัญชีคงค้าง การตัดสินใจทางด้านการจัดหาเงิน การตัดสินใจทางด้านการลงทุน*

Does Financially Constrained Firms have an Access to External Finance? : The Effect of Mispricing on Corporate Financing and Investing Decisions

Wattanee Siritatsawas, PhD
Assistant Professor of Accounting Department
Thammasat Business School, Thammasat University
Email: wattanee@tbs.tu.ac.th

Received: January 12, 2021
Revised: July 12, 2021
Accepted: July 15, 2021

ABSTRACT

In this paper, I discuss the impacts of stock price's misvaluation on corporate decisions, specifically external financing and investing decisions. Stock price's misvaluation occurs when the stock price is above or below its fundamental value. Differences in price are created by misvaluation of investors who are less informed on stock's value. Prior literatures have examined whether stock mispricing has a real business consequence, specifically external financing decisions and investing decision of the firms. I also discuss how stock mispricing has any positive consequence to the financially constrained firms. Since financially constrained firms face higher transaction and agency costs than unconstrained firms when the raising of capital in equity market, the potential that the manager of financially constrained firms to use accruals to lead an investment decision of investor is discussed

Keywords: *Mispricing, Financial Constraints, Accruals, Investment Decision, Financing Decision.*

Introduction

The purpose of this paper is to discuss on role of mispricing on corporate decisions, including their financing and investing decisions in financially constrained firms. First, I discuss the impacts of stock market's misvaluation impact on corporate decisions related to investing and external financing decisions. Previous studies suggest that corporate investments are related to market timing of stock price's valuation, that is, firms that rely more on external finance, will increase investment when their stocks are overpriced.

Second, I discuss a concept of financially constrained firms and how indexes are constructed to capture the characteristic of firms that can be classified as financially constrained. I also discuss the association of a financially constrained firm's behavior on financing and investing decisions and the impact on use of accruals by manager of financially constrained firms to investment decision of investors. Financially constrained firms are firms that face a high transaction and agency costs when they raising external fund, it is possible that they are more likely to take an opportunistic reporting. That is, financially constrained firms are expected to have greater incentive than unconstrained firms to use accruals in an attempt to increase their stock price and raise external capital at a higher price.

The layout of this paper is as follows. The first section describes an overview of impacts of stock market's misvaluation on corporate decisions. The second section provides a discussion on how attributes of financially constrained firm is defined. The third section discuss impact on use of accrual mispricing in financial reporting by financially constrained firms. The fourth section is a conclusion.

Impacts of Stock Market's Misvaluation on Corporate Decisions

Stock mispricing occurs when the stock price is above or below its fundamental value. Investors who are less informed and/or not rational on stock's value create difference in price. Stock mispricing affects the cost of firm's external financing and thus the cost of capital used to evaluate investments. When the stock is overvalued, manager has a lower cost of external financing. When stock is undervalued, manager has a higher cost of external financing, and so avoids raising funds.

A number of researches examine whether mispricing is associated with corporate decision. When managers consider an implication of mispricing when making investing and financing decisions, it implies that the corporate decisions depend on the manager's view of asset pricing and are consistent with view of behavior school that managers undertake and investment decisions based on cues from the market, even though market prices may deviate from fundamental values. The scenario is in contrast with the classical view, which suggests that manager does not take into account of stock mispricing, and base their investment decision on whether or not it maximizes the fundamental value of the firm.

Mispricing has impacts on investment in two ways. If stocks are overpriced, the cost of capital from equity financing becomes lower relative to other sources of financing (i.e. the managers of undervalued firms are less likely to issue equity due to high cost of undervalue equity). Badertscher et al. (2019) also suggest that public firm misevaluation (proxied by using both the price-to-fundamental ratio) positively affects private peer firm investments because private firm stakeholders share in the sentiment associated with misvaluation in public markets.

In contrast, Polk and Sapienza (2009) suggest that managers have an incentive to favor short-horizon shareholders, which focus more on the current stock price rather than on the long-run value of the firm. In this regards, manager would try to overvaluation of stock price by increasing corporate investment to convey a potential growth of the firms and to justify current high stock prices. Therefore, firms might attempt to increase stock price through their investment activities.

Shen et al. (2021) show that overvaluation of stock price is associated with company's innovation investment (i.e. overvaluation of the stock is significantly positively related to firm innovation). This is in line with Ming et. Al (2020) which show that stock overvaluation is strongly associated with measures of firm's investment in the form of R&D, and innovative output and inventiveness using patent-related measures.

Chang et al. (2011) take into consideration on firm's level of internal cash flows effect on stock mispricing. The internal cash flows is a representation of an internal wealth and a liquidity, and is an important factor in determining firms' investment decisions, especially for those firms that play a role in capital market imperfections. In this regard, they examine how internal cash flows and stock mispricing jointly influence various corporate decisions simultaneously, on investment, external financing and liquidity decisions. They find a higher level of internally generated cash flows has a mediation effect on use of mispricing. That is, when firms have sufficient internal cash flows, the impacts of mispricing on investment, external financing and cash holdings are less likely; suggesting that the real effect of mispricing is weaker for firms with higher level of cash flows. Moreover, when firms become more overvalued, they experience lower investment-cash flow sensitivity, a lower cash flow sensitivity, and weaker substitution between internal fund and external financing.

Campello and Graham (2013) examine effects of stock mispricing on investment decision in financially constrained firms. Financially constrained firms as those that do not have enough cash to undertake investment opportunities and that face severe agency and transaction costs when accessing capital markets. It is an important empirical research topic in corporate finance since it has an effect in firms' investment decisions (Kaplan & Zingales, 1997) and firms' non-operational decisions (Kurt, 2012), particularly corporate financial reporting. Researchers are interested in how manager of financing constraints firm make a corporate investing and financing decisions in response during the time of mispricing.

On the account, Campello and Graham (2013) examine capital investment, stock issuance, and cash savings behavior of financially constrained and unconstrained non-tech manufacturers. Particularly, they try to identify mechanism through which mispricing affects financing and investment activities. As overvaluation helps firms to relax financing constraints, high stock prices affect corporate policies. During the bubble period of economy, constrained non-tech firms issued equity in response to mispricing and used the proceeds to invest. They also saved part of those funds in their cash accounts. These results are in opposite patterns with unconstrained non-tech firms, nor for tech firms. They find that a spillover effect of mispricing seems to enhance welfare by relaxing financial constraints and allowing for investment spending in valuable projects that otherwise would go underfunded. This implies that what appears to be overvaluation in one sector of the economy may have welfare-increasing effects across other sectors.

How Attribute of Financially Constrained is Defined?

Researchers define financial constraints in various ways and construct proxies to captures the financially constrained characteristic. Whited and Wu (2006) define financially constraints in terms of the supply-of-capital curve: the more inelastic the supply of capital, the more costly the firm finds it to raise an additional unit of external capital. If the curve becomes vertical and the firm will be shutout of the capital markets. They build a structure index of firms' external finance constraints by using combination of various variable, including cash flow to assets, dividend, long-term debt to total assets, size, sales growth, and industry sales growth. On the other hand, Fazzari et al. (1988) define constraints in terms of the wedge between a firm's opportunity cost of internal capital and its cost of external capital. The larger the wedge, the more constrained a firm is.

Hadlock and Pierce (2010) find that firm size and age are particularly useful predictors of financial constraint levels, and propose a measure of financial constraints based on firm size and age characteristics, which referred as "The Size-Age (S&A) Index". Since small firms are younger and less well-known and thus, more vulnerable to capital market imperfections. They are likely to have higher expected transaction and agency costs than a larger firm due to information asymmetries.

Fazzari et al. (1988) find that financially constrained firms pay low dividend. This is based on the idea that dividends and investment use funds competitively and constrained firms cannot produce sufficient internal cash, hence, they pay low dividend in order to allocate more fund on investment. They use the payout ratio as a measure of financial constraints, which is defined as the ratio of total distributions including dividends paid to preferred stocks, common stocks, and share repurchases divided by operating income before depreciation.

Nevertheless, Farre-Mensa and Ljungqvist (2015) test how well these financial constraints indexes can measure or identifies firms that are truly constrained in the equity markets. They proposed that these constrained firms faced with an inelastic supply of equity should never be able to simultaneously raise and pay out equity, which is referred as "equity recycling". However, they find that these constrained firms can raise equity and then use some of the proceeds of their equity raises to increase payouts to their shareholders. These findings indicate that these constrained firms does not face with an inelastic supply of equity curve. So, they conclude that firms typically classified as constrained firms are not in fact behave as if they were constrained because these firms use the proceeds of equity issues to increase payouts to shareholders.

Does Manager of Financially Constrained Firms Use Accruals to Lead an Investment Decision of Investors?

Given that financially constrained firms may face higher transaction and agency costs than unconstrained firms when the raising of capital in equity market, it is possible that they are more likely to engage in opportunistic reporting. That is, financially constrained firms are expected to have greater incentive than unconstrained firms to use accruals in an attempt to increase their stock price and raise external capital at a higher price.

A significant number of studies examine impact on use of accruals to firm's financial information and proposed that managers use accrual accounting to manage earnings. However, researchers do not always agree on how this evidence should be interpreted while some believe that their research provides evidence of opportunistic, others believe that managers exercise their discretion to improve the informational value of accounting numbers.

The financial reports are publicly available information, given semi-strong form market efficiency, it is predicted that investors would efficiently impound information about the firm's cash flows and accruals into equity prices. However, Sloan (1996) argues that investors do not impound this information correctly into price. He proposed that stocks with relatively high (low) accruals tend to have negative (positive) future abnormal returns. This phenomenon is referred to as an accrual anomaly, in which the market participants rely on earnings information and fail to distinguish between accrual and cash flow components of current earnings.

A number of research show a negative relationship between accruals and subsequent stock returns, suggesting that firms with high accruals, their stock are overpriced relative to otherwise similar firms. Xie (2001) follows up Sloan (1996) by reexamining the accrual anomaly in order to explore the cause distinguishing between abnormal and normal components of total accruals. He contends that market participants particularly overestimate the abnormal portion of accruals estimated by the Jones (1991) model. He concludes that the mispricing of total accruals that Sloan (1996) documents is due largely to abnormal accruals. Teoh et al. (1998) show that issuing firms is likely to high level of discretionary accruals and firms whose earnings are inflated by discretionary accruals have poor subsequent returns.

A few research examines how financially constraint characteristic effect their manager's financial reporting behaviors and their impacts to access external funds. The rational of the motivation is that the manager of financially constrained firms are likely to have greater incentive than unconstrained firm to use accruals in order to increase their stock price and raise external capital at a higher price. These researches propose that use of discretionary accruals provide beneficial to firm's value because they provide corporate manager a mean of conveying private information on their firms' performance to external capital provides. On the other hand, managers are under pressure to influence their reported earnings in order to maximise their interests, such as to retain management position and increase the stock returns and their compensation plans. In this circumstance, use of discretionary accruals does not help to convey useful information to the investors, but use only for the manager's own benefits.

Kurt (2012) finds negative association between the stock returns in the accelerated share repurchases (ASRs) announcement and pre-repurchase positive discretionary accruals. His research find that managers use accelerated share repurchases (ASRs) along with positive discretionary accruals to manage reported earnings per share (EPS) rather than to signal their favorable private information about firms' prospects as there is no evidence of positive long-run abnormal stock performance during the post-ASR period. Specifically, ASR firms report positive discretionary accruals in the quarter of the repurchase announcement and that the upward earnings management increases with the percentage of equity repurchased. However, there is a negative association between the ASR announcement returns and pre-repurchase positive discretionary accruals, suggesting that investors perceive the positive discretionary accruals as the result of managerial opportunism. Further, ASR announcements are not followed by an increase in operating performance.

Also, Kurt (2012) investigates whether financially constrained firms tend to manage their earnings more aggressively around seasoned equity offerings (SEOs) as compared to financially unconstrained firms. He finds that financially constrained firms report higher income-increasing accruals than unconstrained firms. However, he finds that investors can well anticipate this greater earnings inflation and adjust firms' stock prices accordingly at the time of the offering. So, they correctly conjecture that there will be higher earnings inflation by financially constrained firms and adjust their valuation accordingly at offering announcements.

On the other hand, literatures suggest that managers report positive discretionary accruals to signal their private information to the market participants (e.g., Subramanyam, 1996). Linck et al. (2013) find that financially constrained firms inflate their earnings more as compared to unconstrained firms during the quarters prior to investment and attribute this finding to managerial optimism such that constrained firms use positive discretionary accruals to signal their prospects and enhance their financing capacity.

Also, Linck et al. (2013) argue that a financially constrained firm with valuable projects can use discretionary accruals to credibly signal positive prospects, enabling it to raise capital to make the investments. They find that financially constrained firms with good investment opportunities have significantly higher discretionary accruals prior to investment compared to their unconstrained counterparts. Constrained high-accrual firms have higher earnings announcement returns than constrained low-accrual firms, obtain more equity and debt financing, and invest in projects that appear to improve performance. These results provide supporting evidence that the use of discretionary accruals can help constrained firms with valuable projects ease those constraints and increase firm value. However, it is criticized that using equity issuance and accruals makes it hard to separate the market timing effect from the catering effect. Moreover, a significant relation between equity and investment does not necessarily prove the investment-mispricing relation; rather, it may point to the mechanical process of raising more capital to finance already scheduled investment projects.

Conclusion

This paper discusses on concept of mispricing equity and its implications for corporate investment, financing, and financial reporting decisions. Stock mispricing occurs when the stock price is above or below its fundamental value. Prior literatures examine whether stock mispricing has a real business consequence, specifically investing and external financing decisions. Stock mispricing affects the cost of external financing and thus the cost of capital used to evaluate investments. When the stock is overvalued, manager has a lower cost of equity financing. When stock is undervalued, manager has a higher cost of external financing, and so avoids raising equity. Literatures suggest that the overvaluation helps firms to relax financing constraints.

A number of research defines financial constraints through various firm's characteristics such as size, age, leverage, and dividend and construct their indices (i.e. Fazzari et al., 1988; Hadlock & Pierce 2010; Whited & Wu, 2006) in order to better identify firms that should be captured as financial constraints. However, there is still no consensus on which indices can better capture financially constrained firms. In this regards, researchers usually calculated firm-data based on several indices and, then compare their statistical results on their empirical finding in order to analyze and confirm a consistency of the results.

Furthermore, paper provide a review of literature that discuss how financially constraint characteristic effect their manager's financial reporting behaviors and their impacts to access external funds. It is hypothesized that financially constrain firms are expected to have greater incentive than unconstrained firms to use accruals to increase their stock price and raise external capital at a higher price. A few research has made and results are mixed. Kurt (2012) finds negative association between the stock returns in the ASRs announcement and pre-repurchase positive discretionary accruals. His finding suggest that investors perceive the positive discretionary accruals as the result of managerial opportunism. Further, ASR announcements are not followed by an increase in operating performance.

On the other hand, Linck et al. (2013) examine whether manager of financially constrained firm employ discretionary accruals to increases investment efficiency for firms that have valuable investment opportunities. The study shows that firms can use discretionary accruals to make disclosures more informative. Their research shows that managers with valuable projects, but facing financial constraints, may use discretionary accruals to convey information to the market, easing constraints and allowing them to efficiently increase investment.

References

Badertscher, B. A., Shanthikumar, D. M., & Teoh, S. H. (2019). Private firm investment and public peer misvaluation. *The Accounting Review, 94*(6), 31-60.

Bradshaw, M. T., Richardson, S. A., & Sloan, R. G. (2001). Do analysts and auditors use information in accruals? *Journal of Accounting Research, 39*(1), 45-74.

Campello, M., & Graham, J. R. (2013). Do stock prices influence corporate decisions? Evidence from the technology bubble. *Journal of Financial Economics, 107*(1), 89-110.

Chang, X., Dasgupta, S., & Wong, G. (2011). How do firms allocate internal cash flow? The effect of misvaluation and costly external financing. *SSRN Electronic Journal.*

Dong, M., Hirshleifer, D., & Teoh, S. H. (2020). Misvaluation and corporate inventiveness. *Journal of Financial and Quantitative Analysis,* 1-29.

Farre-Mensa, J., & Ljungqvist, A. (2015). Do measures of financial constraints measure financial constraints? *Review of Financial Studies, 29*(2), 271-308.

Fazzari, S. M., Hubbard, R. G., Petersen, B. C., Blinder, A. S., & Poterba, J. M. (1988). Financing constraints and corporate investment. *Brookings Papers on Economic Activity*, 1988(1), 141.

Hadlock, C. J., & Pierce, J. R. (2010). New evidence on measuring financial constraints: moving beyond the KZ index. *Review of Financial Studies, 23*(5), 1909-1940.

Jones, J. J. (1991). Earnings management during import relief investigations. *Journal of Accounting Research, 29*(2), 193.

Kaplan, S. N., & Zingales, L. (1997). Do investment-cash flow sensitivities provide useful measures of financing constraints? *The Quarterly Journal of Economics, 112*(1), 169-215.

Keynes, J. M. (1942). *The general theory of employment, interest and money*. MacMillan.

Kurt, Ahmet C. (2013). Essays on corporate financial reporting (Unpublished doctoral dissertation). *University of Pittsburgh, Pittsburgh, Pennsylvania.*

Linck, J. S., Netter, J., & Shu, T. (2013). Can managers use discretionary accruals to ease financial constraints? Evidence from discretionary accruals prior to investment. *The Accounting Review, 88*(6), 2117-2143.

Polk, C., & Sapienza, P. (2008). The stock market and corporate investment: A test of catering theory. *Review of Financial Studies, 22*(1), 187-217.

Shen, H., Zheng, S., Xiong, H., Tang, W., Dou, J., & Silverman, H. (2021). Stock market mispricing and firm innovation based on path analysis. *Economic Modelling, 95*, 330-343.

Sloan, R. G. (1996). Do stock prices fully reflect information in accruals and cash flows about future earnings? *Accounting Review,* 71(3), 289-315.

Subramanyam, K. (1996). The pricing of discretionary accruals. *Journal of Accounting and Economics,* 22(1-3), 249-281.

Teoh, S. H., Welch, I., & Wong, T. (1998). Earnings management and the underperformance of seasoned equity offerings. *Journal of Financial Economics,* 50(1), 63-99.

Whited, T. M., & Wu, G. (2006). Financial constraints risk. *Review of Financial Studies,* 19(2), 531-559.

Xie, H. (2001). The mispricing of abnormal accruals. *The Accounting Review,* 76(3), 357-373.