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"Global Goals, Local Actions: Looking Back and Moving Forward 2020"

How Managers Make Financing Decisions in Dual-Undervalued Markets?

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Abstract

The increasing use of internal equity financing across corporate firms in the world does not support the assertion that securities issuance determines the corporate financing decisions of firms. High internal equity financing is relevant for managerial aversion in financing decisions. This paper investigates a behavioural pattern in financing decisions when equity market is undervalued, and at the same time, firms experience unfavourable or costly debt market. The theoretical assumptions and contextual research with practical data are collected from the World Bank Enterprise Survey. Financing decisions of firms is largely dependent on retained earnings. World Bank Enterprise Survey showed that over less than 15 percent of investments are financed internally by firms across all countries due to undervaluation of equity markets and unfavorable or costly debt markets. Managers maximize the risk in equity financing (risk aversion) and minimize the regret of debt capital (regret aversion) plus the cost of risk reduction in dual undervalued equity and debt markets. The paper reveals that there is evidence of an internal equity persistence among firms. Managers are constrained by the dual undervaluation of equity and debt markets that triggers risk and regret aversion in financing decisions. Managerial aversion (risk and regret aversion) can be used to explain the variations in the corporate financing of firms. Practically, managerial aversion may reduce the risks of external financing i.e. agency problem. Theoretically, managerial aversion follows the assumptions of the regret theory than marketing timing theory in capital structure decisions.

Keywords: Risk aversion, regret aversion, financing decision, capital market undervaluation.



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Introduction

The timing of the capital markets influences how corporate managers make financing decisions. Managers do benefit from the overvaluation of stocks by raising additional equities to support net profit investments. Baker and Wurgler (2002) offer support that the debt and equity markets work in inverse conditions; that is when the stock or equity market is overvalued, we expect the debt market to be optimally unfavourable or vice versa. However, Fama and French (2005) offered a contrary finding that security issuance decisions are not consistent with existing capital structure theories. This paper offers a new claim that corporate financing decision is influenced by managerial behaviour following undervaluation of both equity and debt markets. Although, past studies examined managerial financing decisions from a behavioural perspective using stock compensation and managerial entrenchment (See Lewellen, 2006), this paper argues that managerial behaviour in corporate financing is influenced by capital market undervaluation.

Optimizing Undervaluation Constraint – Decision Through Aversion

In theory, managers use more equity financing when the stock market is overvalued and more debt financing when it is undervalued, and vice versa due to the advantage of stock market mispricing. *However*, in practice, stock markets are generally undervalued and debt markets are unfavorable due to increased costs of debt financing. This dual-markets undervaluation seems promising as aggregate financing is subject to capital market conditions and the role played by financial intermediaries. It implies that dual-markets undervaluation affects individual firms' financing decisions and document corporate managers' equity-risk maximization and debt-regret minimization objectives in wealth creation. Thus, in practice, managers are faced with both risk-aversion and regret aversion decisions in corporate financing.

Data shows that across all countries, the proportion of investments financed internally is 71.2 percent, investments financed by banks is 15 percent, leaving a balancing figure of 13.8 percent financed by external equity (World Bank Enterprise Survey, 2018). As illustrated in Figure 1, the proportion of investments financed internally using internal equity financing (i.e. retained earnings) is above 70 percent across all sovereign regions except in



Latin America and the Caribbean that has 62.2 percent of firms' investment financed internally. The proportion of investments financed using external equity from the equity market and external debt from debt markets (such as financing institutions) is less than 20 percent across all countries. Sub-Saharan Africa firms experienced the lowest in the use of external debt to finance corporate investments with 10 percent of total corporate financing. In practice, transactions costs in leverage decisions give more advantage to internal equity financing than external finance since external finance triggers high bankruptcy costs, projects or investments omission, and default risk. Corporate managers use less equity and low debts when the equity market and debt market are undervalued (Heaton, 2002).

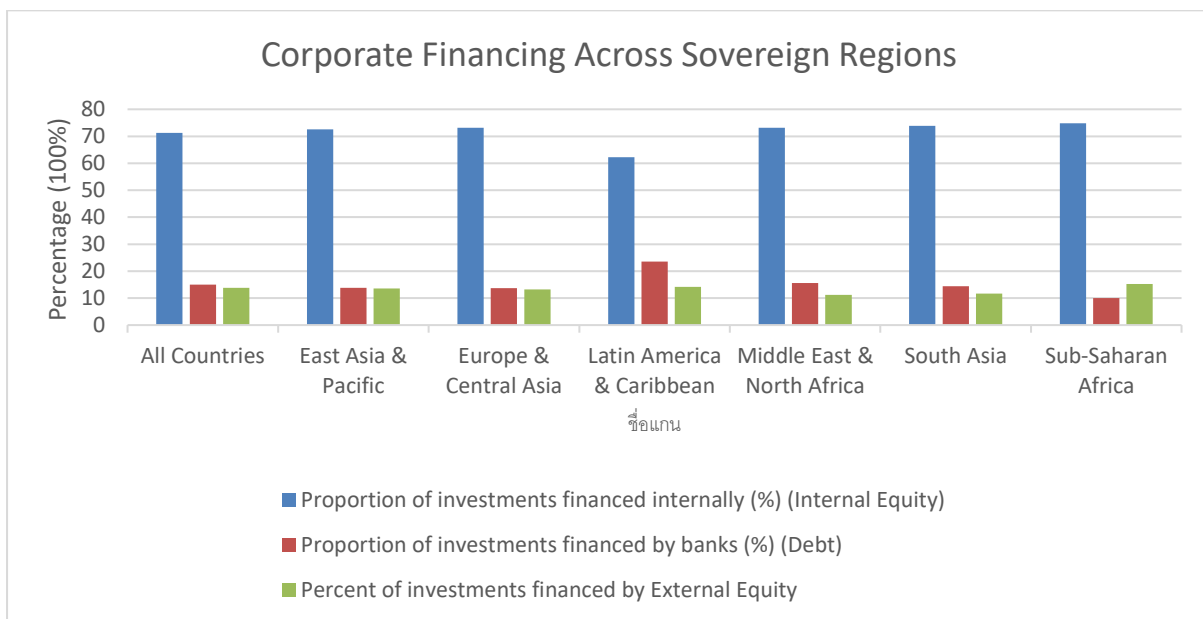


Figure 1: Corporate Financing Across Sovereign Regions.

Source: Authors' Computation from the World Bank Enterprise Survey (2018)

Dual Undervalued Markets and Managerial Behavioural Actions

The relation between management and investors is dependent on informational asymmetries. External financing is less desirable and undervalued when compared to the degree of informational asymmetry (Myers & Majluf, 1984), and thus, firms store excess cash. Firms managers are often reluctant to issue common equity when they discern that their



stocks are undervalued. Graham in his survey of Chief Finance Officers (CFOs) stated that only 3 percent of CFOs perceive that their stock is undervalued while 66.7 percent think it is undervalued by the stock market. Moreover, common equity undervaluation, due to informational asymmetry affects convertible debt policy since firms often avoid equity financing as they must wait for the good news of equity information. Consequently, and at the same, the debt market is not favorable, and they do want to minimize the regret to use debt (i.e. distress costs). In this situation, firms call for convertible debts to reduce the uncertain firm's riskiness and "delayed cost" of undervalued common equity issuance.

As illustrated in Figure 2, two issuance states are presented; undervaluation, and overvaluation. Each issuance period or state exhibits some features in corporate financing features, that explain some corporate managerial behaviors. In undervalued markets, managers are both risk and regret averse. However, in overvalued markets, managers exhibit different behavioral actions such as managerial optimism, managerial entrenchment. About 70 percent of firm's capital structure determinants can be attributed to managerial factors and firm characteristics (Frank & Goyal, 2003), and the inconsistencies in corporate finance theories can be solved through managerial behavioral traits.

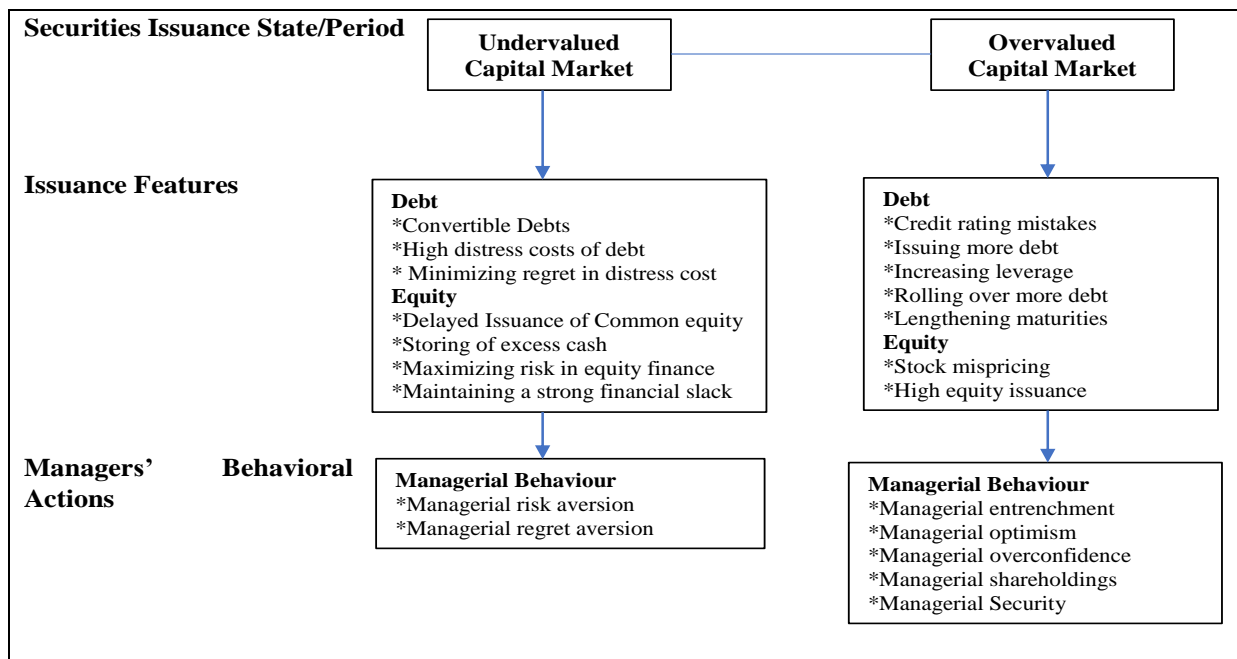


Figure 2: Securities Issuance State, Issuance Features, and Managers' Behavioural Actions.



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The Practice of Managerial Aversion – Risk and Regret Aversion

Regret aversion occurs when the pre-optimal decision of the firm's manager turns out to be post-suboptimal. In the situation when the firm's manager is regret averse, banning the firm from taking more debts will lead the firm to produce lower leverage (debt conservatism), reduce moral hazard, and reduce agency problem. Most listed firms are debt conservative in their financing policy (Graham, 2000), and maintaining debt conservatism decision is dependent on regret aversion of decision-makers. A regret averse firm manager anticipates the possibility of associated losses and costs in a reduction in free cash flow or use of more debt may stick to, the status quo of debt conservatism or low leverage to avoid experiencing regret. Therefore, implying that higher regret aversion behavior of the corporate manager is associated with lesser debt usage, and more internal equity dependent. Regret aversion describes the minimization of regret in debt financing that is triggered by high costs of debt financing.

Risk aversion describes the manager's financing decision to maximize risk in equity finance by focusing more on excess cash and internal equity. Risk aversion is a function of four factors:

- Managers' preference for less risk,
- Managers' willingness to pay for risk reduction,
- Managers' consideration of risk frequency (probability of failure) and risk severity (financial impact), and
- Managers' consideration of pre-loss (corporate value maximization) and post-loss (earnings stability) objectives.

Risk aversion is a function of the probability of failure (risk frequency), the financial impact of risk-taking (risk severity), and the reduced costs of maintaining lower external equity with higher internal equity (Banks, 2008). Risk-averse managers differ from non-risk averse managers due to lower leverage usage, depending on internal and external equity financing.



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Implications for Corporate Managers

Our findings have implications for how managers make financing decisions in dual undervalued markets situations. Today, firm managers are encouraged to maximize risk in undervalued stocks and minimize regret in costly debts. But it's unwise to document that corporate financing decisions are solely based on stock mispricing or overvaluation, as in practice, firms finance largely by internal funds.

Indeed, this paper suggests that firms' managers may have wrongly underestimated the costs and benefits of dual undervalued markets – as well as wealth creation – by focusing on their compensation or shareholdings. Managers should focus more on how to create wealth when their stock is undervalued, and distress cost of debt is expensive. The paper argues that managers can build on their risk-averse and regret-averse behavior as a crucial strategy to manage financial constraint due to unfavorable market conditions. Managerial aversion can go a long way to reduce the effect of undervalued stocks and distress costs, as undervalued stocks are sensitive to future higher returns and low credit ratings of firms' debts capture momentum profitability.

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