



Dr Shushu Liao

E: Shushu.Liao@the-klu.org T: +49 176 267 973 53 W: sites.google.com/site/shushuliao90

Stock market valuation: Don't hate the player, hate the game!

Research Objectives

Dr Shushu Liao examines how the overvaluation of a corporate company impacts the market.

Detail

Bio

Dr Shushu Liao is an Assistant Professor of Corporate Finance in the Department of Leadership and Management at Kühne Logistics University and was a research fellow at Auckland Center for Financial Research. Her research tackles important financial decisions in corporations, ranging from the interplay between corporate real decisions and financial status; stock market valuations and investment choices; corporate finance in crisis periods; imprinting effects of CEO management styles; finance implications of corporate social responsibility; and diversity and inclusion as a value driver. Her research regarding corporate finance and financial stability has been published in peer-reviewed journals such as *Economics Letters*, *European Financial Management*, *British Journal of Management*, *Journal of Banking and Finance*, and *Journal of Business, Finance and Accounting*.

Funding

Kühne Foundation

Collaborators

Marco Errico, co-author



References

Liao, S, Errico, M, (2022) Corporate investment and stock market valuation. *Journal of Business Finance & Accounting*, 00, 1–25. doi.org/10.1111/jbfa.12649

Polk, C, Sapienza, P, (2008) The stock market and corporate investment: a test of catering theory. *The Review of Financial Studies*, 22(1), 187–217. dx.doi.org/hhn030

Jensen, M, (2005) Agency Costs of Overvalued Equity. *Financial Management*, 34(1), 1–17. doi.org/10.1111/j.1755-053X.2005.tb00090.x

Shleifer, A, Vishny, RW, (2003) Stock market driven acquisitions. *Journal of Financial Economics*, 55, 2219–2258. scholar.harvard.edu/shleifer/publications/stock-market-driven-acquisitions

Stein, J, (1996) Rational capital budgeting in an irrational world. *Journal of Business*, 69, 429–55. doi.org/10.3386/w5496

Jensen, MC, Murphy, KJ, (1990) Performance pay and top-management incentives. *Journal of political economy*, 98(2), 225–264. www.jstor.org/stable/2937665

Personal Response

What next steps do you believe are required for firms to enhance the shareholder's value?

// It's important to emphasise the role of transparency with the highest level of attention. Companies should have proper guidelines regarding what each investment decision is based on. Moreover, earnings evaluation metrics need to be installed and thoroughly executed. A wide range of opinions need to be collected for a large-scale investment project. It's pivotal to initiate an exchange of ideas with shareholders, analysts, auditors and media and create a prompt communication with outsiders based on true facts. //

Stock market valuation

Don't hate the player, hate the game!

There is great importance in understanding how the overvaluation of a corporate company impacts the market. Shushu Liao of Kühne Logistics University in Germany and her co-author Marco Errico have shown that if investors were to have access to equal and accurate financial information for their investments, overvaluation wouldn't be at the mercy of corporate managers. Consequently, overvalued financial reports negatively impact a company and lead to further manipulation. Without full transparency, investors have a false perception of a company's prospects. However, this is resolvable by increasing transparency and the CEO retaining control over the value of a firm.

Could it be that company stock prices aren't all that they seem to be? A major challenge within corporations is that stock prices do not represent the company's true value. This misalignment of stock prices means that the stock market is less credible. Subsequently, the value of the stock market impacts the value of investments. In an ideal world, both investors and corporate managers within companies would be openly transparent about the information and economic positioning of a company. However, things aren't always this simple. For a variety of reasons, there is often a discrepancy between corporate managers and investors. Corporate managers can easily change their reports to present the 'perfect picture' for investors. This incentivises them to readily invest in poor projects without basing the decision on the company's economic standings. 'But why is this done', you may ask...

To understand why this happens, Dr Shushu Liao of Kühne Logistics University in Germany and co-author Marco Errico stipulate that equity incentives take place; an example of this is through equity overvaluation. Equity refers to the value of shares in a company. Since

shares are one of the main components of managers' compensation, it is very lucrative for managers indeed if they have overvalued their equity!

HERE LIES THE ISSUE

Corporate managers tailor their investment insights to suit the needs of their investors, to showcase the profitability of a company. However, uninformed investors can be misled regarding the true state of a company's performance. The more asymmetric information between the two occurs, the greater the chance of misvaluation.

Similar complications arise when trying to understand the motivation behind takeovers in relation to the market value of a firm. It is not a new phenomenon that the takeover market is a breeding ground for market misvaluation. Shleifer and Vishny (2003) note that market inefficiencies not only impact takeovers but are also at the mercy of 'investor bias'. If a company is obscenely overvalued, investors can cash out their stake and buy undervalued companies – meaning that they can get far more for their money.

When managers hide the true figures of their earnings, it has a knock-on effect within the company, where future revenue must be pulled forward and utilised at present. Doing so will require even more manipulation in the future. It becomes a continuous cycle. To demonstrate this, Jensen et al (2005) took a corporate survey of 401 CFOs to measure the popularity of remediation needed for them to achieve their earning targets. 80% of CFOs agreed that a decrease in discretionary spending was needed and a further 55% recommended delaying new projects to achieve their profit targets. Furthermore, an emphasis was placed on booking revenues at present rather than delaying them in the next quarter. Here's an example: imagine that we are currently in quarter one (Q1) with an expected

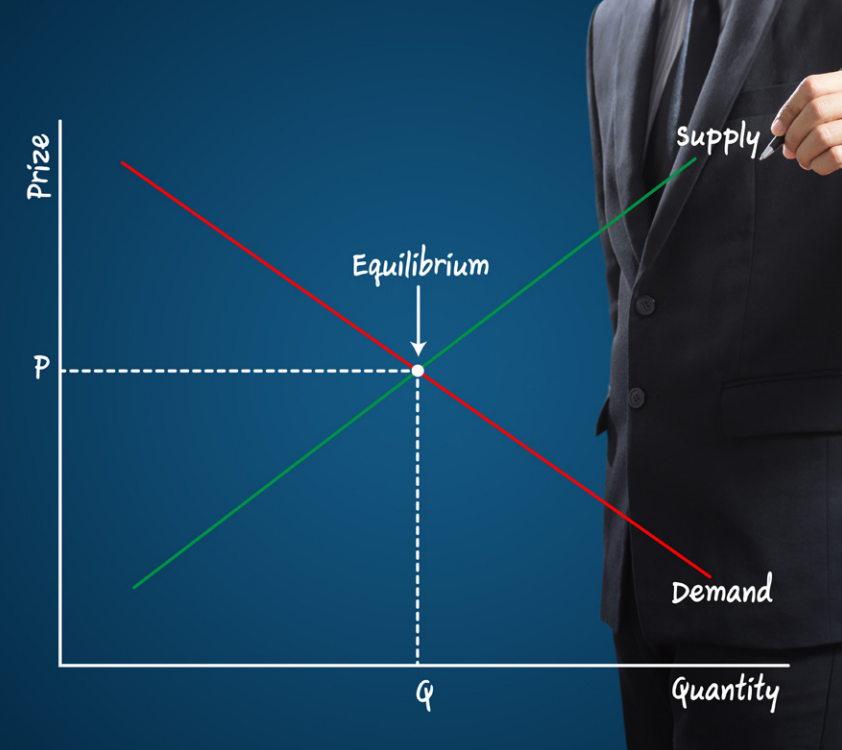
earnings target of £100,000. However, we have only achieved earnings of £20,000. We also have £50,000 worth of expenses. It's not looking good, as we are off track! However, we anticipate £80,000 worth of revenue in quarter two (Q2). The £80,000 revenue is borrowed from Q2 into Q1, and that £50,000 cost of expenses is pushed out to Q2 or even later. When it's time to report on revenues for Q1, everything looks fine as we have achieved the £100,000 and delayed the expenses. However, when Q2 comes around, even more manipulation is required!

COMPENSATION IS THE GOAL

But what's in it for corporate managers? Are they the main players of the game? Well, in some ways, yes. As within most companies, managers are incentivised to positively perform to reach their desired targets – mainly because compensation is tied to perceived good performance levels. Due to this, managers can manipulate the 'game' to their favour by establishing achievable targets and their routes to achieve them. You can probably guess, tying compensation to the company's earning targets can easily lead to a lack of earning information transparency. The integrity of a manager's financial report quality can be questionable and lack integrity since managers do not want to miss out on their compensation, which is linked to equity prices.

As Liao and Errico describe in their recent paper, published in *Journal of Business, Finance and Accounting* in 2022, managers have incentives to engage in excessive spending and investments to boost or maintain equity prices. That is also called the 'catering effect'. Managers no longer make investment decisions based on the intrinsic value of the investment projects, but based on whether it can give them leeway to artificially inflate stock prices. However, this does have a domino effect on a company. If many managers follow this pattern, the result is low earnings quality and overvaluation.

It's worth noting that managers aren't solely at fault here. The compensation applies to C-suite as well – meaning executive-level managers like the CEO, CFO, COO, etc. At this level, CEO



Stock prices are affected by supply and demand.

compensation is at the mercy of capital markets. Capital markets will punish a firm if they do not meet its analysts' forecasts (even by a minuscule amount). It's a huge win for a firm if they beat the analyst's forecasts within a quarter. Typically, stock prices increase by 5.5%. Subsequently, if the forecasts are missed, stock prices can fall by -5%. C-suite knows that they'll be rewarded with a premium for meeting the forecasts. With this at stake, it's not surprising that managers tend to 'cook the books' to hide uncertainty in their

findings from Liao and Errico's paper show that managers who have a larger stock portfolio in their compensation package are likely to manipulate the value. That is, they are likely to inflate the equity prices by overinvesting. In the paper, they show that managers are inclined to use their investment choices to cater to investors' information needs for the firm's future profitability. This would in turn lead to overvalued stock prices as uninformed investors tend to interpret this strategically designed

80% of CFOs agreed that a decrease in discretionary spending was needed to achieve their targets.

companies. However, doing so comes at a price – a direct impact on a company's value. This scenario is precisely what can contribute to overvaluation.

THE IMPORTANCE OF LEVEL-SETTING

There is an end to the game. Liao and Errico developed a structural model, in which the premise is that the flow of information between managers and investors is not shared fairly. This creates principal-agent conflicts including asymmetric information (James & Costagliola, 2023). If managers were to prioritise the best interests of their shareholders and adapt their investment choices around them, an argument could be made that the principal-agent conflicts could be reduced. Nonetheless, empirical

excessive investment behaviour as a 'good' signal of the firm's future prospects. Also, even though tying managers' compensation to equity prices has received support from academic researchers (eg, Jensen and Murphy, 1990) as a (partial) remedy to resolve principal-agent conflicts and improve corporate governance, in this case, managers' inclination to do so is amplified when their compensation is more tied to equity prices since inflating stock prices become more lucrative to them.

A solution to stop overvaluation could be for the CEO to have a longer-term vision for the growth of the company, and for investors to have a proper monitoring mechanism in place to govern the financial report quality of the firm. Furthermore, investors should be cautious about too much reliance on equity-based compensation as the primary incentive device to motivate C-suite.



research OUTREACH

The public outreach magazine for the research community

researchoutreach.org

Partnership enquiries: simon@researchoutreach.org



 creative commons