# Research on the Factors of Moderation in Enhancing Corporate Value

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Abstract: The link between systematic risk and the performance of firms was initially established. The systematic risk was investigated as a framework of CAPM, the Capital Asset Pricing Model, which is an efficient approach to risk assessment. The systematic risk is represented using the CAPM's coefficient (beta). Indicators of financial performance were used to analyze systematic risk. Such indicators comprise of operational efficiency, liquidity, profitability, market valuation, and financial leverage. The study comprises the analysis of Lululemon Company, its competitors, Nike and Adidas Companies, as well as the comparison to the NASDAQ and DAX index. Based on the results of the estimation, the systematic risk of companies is inversely related to profitability, market value, and efficiency indicators. Also, there exists a negative correlation between the systematic risks of one year compared to the previous years. The findings indicate a positive relationship between leverage and systematic risk, growth and systematic risk are not related.

**Keywords:** financial performance, CAMP model, systematic risk, beta

#### 1. Introduction

With the gradual improvement of the company's modernization system, financial performance evaluation has become the company's manager and investors and relevant departments must pay attention to the part. The fairness and accuracy of financial performance evaluation. Now we can use this evaluation to put forward effective suggestions according to the development of status based on this principle. Nevertheless, there is still some blank area such as application with one-sided consideration and ignorance of intangible assets, which we will discuss later. Risk is mainly linked to adverse events. Nonetheless, the risk is the probability of receiving lower returns in the context of investment. Therefore, a percentage of profits (return) is needed by shareholders, and the required rate of return increases with the relative risks. Performance and risk are directly correlated in rational markets. In the current era, practitioners and academic experts use beta to evaluate the strategic decisions of a business by analyzing the cost of capital. The great importance of beta for investors and company executives calls for further research in this field. The French and Fama model postulates that systematic risk is different across different sectors. In regards to controlling properties of firms that bias or impact results, the impact of the time-invariant subsets is considered, to assess the effect of the determinants on systematic risk variations. Time-invariant subsets vary across different firms. Also, the difference between good corporate governance (GCG) strategies should be considered to assess how the financial indicators of each firm influences systematic risk. The beta coefficient, a

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component of CAPM, is the most common approach used in the measurement of risk. Beta illustrates relative risk, and assesses the sensitivity of assets to the overall adjustments of the market index. As such, beta illustrates the systematic risks that the assets are exposed to.

# 2. Literature Review

Theoretical hypotheses exist for the interpretation of CAPM, such as the efficient market hypothesis [1]. This study factors in that prices show the existing information of companies over a given period in an impartial manner. The performance of a company can thus be derived directly from its share prices. Beta fundamentals are constructed through the analysis of financial accounting data to assess systematic risks. While the companies experience systematic risk, their sensitivity to market changes and macroeconomic conditions differs, as a result of their specific accounting properties. Beta affirms that systematic risk is influenced by different variables of accounting such as the mix of financing, liquidity, and purpose of paying the dividends. Nonetheless, past models of risk prediction failed to account for investor confidence, which is essential in the determination of systematic risk. Ni and his partners revealed that changes in the sentiments of consumers are directly related to stock returns [2]. Also, the study revealed that individual investors are influenced by macroeconomic conditions compared to institutional investors. Individual investors price stocks incorrectly, a relationship revealed by Lindblom [3].

The objective of this study is to assess factors influencing systematic risk through the analysis of the financial indicators and systematic risk. The basic idea was to assess systematic risk as a framework of beta estimation, which has become popular with investors and analysts, particularly stock discount rates. Existing literature affirms that the major purpose of firms is the maximization of value and returns. A model that could be used in the prediction of systematic risk would be useful for managers as they need to predict market changes in policymaking. A good comprehension of systematic risks allows shareholders to understand how risky a stock is. Also, business executives benefit from the analysis of the factors that influence systematic risk. This is based on the notion that the stakeholders gain the ability for strategic decision-making to mitigate the exposure of the business to risks, and hence achieve value for the company's stock. Systematic beta risk and properties of business titles are influenced by changes in investing, financing, and operating decisions. An increase in systematic risk is expected to increase returns. In the case of efficient markets with rational investors, systematic risk is a critical factor of corporate governance. In a similar context, sentiment analysis is a method that would be used to assess how shareholders respond to the news and information of companies. The study provides empirical proof of CAPM's coefficient, beta, and assesses how financial indicators influence systematic risk.

#### 3. Theoretical Basis

The capital asset pricing model (CAPM) is a theoretical framework of valuating assets put forward by Lintner (1965), Mossin (1966), and Sharpe (1964) based on the foundation set by Markowitz [4]. The model is used to estimate the expected returns of stock based on systematic risk. The model assumes that there exists an efficient and perfect market and that shareholders diversify portfolios to minimize systematic risks. This model of valuing assets is based on Markowitz's theory of portfolio which analyzes the method to create effective portfolios. The model assumes that shareholders are interested in systematic risk as it stands out to be a source of risk in diversified portfolios. Rational investors strive to maximize their returns to acceptable risk levels and minimize risks to specific return levels. Combining the assumptions of rational investors and efficient markets, the risk is assumed to be the standard deviation's return on a portfolio.

The Markowitz framework depends on the assumptions of the behavior of investors. As previously mentioned, the market is assumed to be effective, investors are considered to be rational, and it is ideal to minimize risks and maximize returns. Investors choose a portfolio based on the averages and choose a positive portfolio of shares. Nonetheless, the predictive ability of the model is not limited by assumptions.

The CAPM framework assesses the impact of risks on the expected returns and is the basis of the theory of asset pricing. In the CAPM model, the expected returns of risky assets are the sum of the risk-free rate and the risk premium, the product of the estimated beta of the asset, and the risk premium. The return of an asset takes the following form:

$$E(Ri) = Rf + b \left[ E(Rm) - Rf \right] \tag{1}$$

Rf-Risk-free rate of interest, [E(Rm)-Rf] is the risk premium, and E(Rm) is the return of a portfolio/'s market. Kasser, J.E postulates there exist two types of risks: systematic risk is the total risk where asset returns change relative to variations of different assets [5]. A combination of assets forms the market portfolio under the assumptions of homogenous expectations. Unsystematic risk is specific to individual assets. Systematic risks are referred to as market risks as they affect assets to some capacity, and hence systematic risks cannot be entirely reduced by diversifying the stock. Assets prone to systematic risks are easily influenced by changes in macroeconomic variables compared to assets that are less prone to systematic risks.

Beta is used in the assessment of the systematic risks of assets using the CAPM model. For instance, the stock of beta assesses how stock moves relative to market returns, and beta is the company's systematic risk. Practitioners view beta as the level to which stock is a substitute of market investments. Past research on the CAPM model has been facing challenges. Chretien and Coggins's study fails to find an essential estimate of beta, but affirms that company size influences stock returns as the effect of size is essential [6]. Book-to-market ratios facilitate variation of returns in a more powerful manner than the size effect.

Financial statements are used to provide information used to measure systematic risks. Financial standards of accounting are used to provide helpful information to different users for strategic decision-making. This study views effective markets are those that manage asset value by applying available information efficiently and promptly. The stock operates based on future expectations by assessing the cash flows and incorporating expected information of accounting into the share prices. However, the emergence of unanticipated accounting information would disrupt the share price. The smooth return of stocks could be disrupted by abrupt changes in accounting data. The rationale for assuming an effective market acts as the basis for analyzing accounting information and the market. Accounting data is used to transmit information. Accounting variables are used to provide information about companies to the market and investors. In efficient markets, capacity information corresponds to the capability to generate information that could influence the expectations of investors. Measures of risk accounting that are linked to the uncertainty of business cash flows are directly related to systematic risks [7]. In another study, the minimum return on assets held by investors is influenced by market betas rather than fluctuation of the returns [8]. Sarkar, S. found a significant relationship between financial and operational leverage [9]. Behzadfar affirmed that there exists a direct correlation between operating leverage and systematic risks [10]. Also, Bhuyan affirmed that airline firms could construct financial strategies to lower costs of operation and systematic risks [11].

# 4. Analysis

The analyzed financial indicators are related to the entire risk of the performance of firms, and hence related to systematic and unsystematic risks. The financial variables used in the analysis comprise leverage, liquidity, market values, operating efficiency, and growth ratios.

# 4.1. Liquidity

The level of liquidity on the financial ratios was assessed based on the liquidity ratios, such as the cash ratio, quick ratio, operating cash flow, and the quick ratio. The quick ratio is the summation of accounts receivables, cash, and market securities, and is calculated as the ratio of the current assets to the current liabilities. The analysis affirms that there exists a negative correlation between liquidity and the level of systematic risk. The high availability of liquid assets such as cash allows companies to meet its cash needs efficiently and generate higher returns. Therefore, assets with low ratios of liquidity are associated with investments that are susceptible to market volatility.

## 4.2. Profitability

The analysis affirms that there exists a negative correlation between systematic risk and profitability. This can be explained by the fact that profitability reduces the volatility of a business. Stable operating cash flows minimize the systematic risk, which depends on how the company runs its assets.

The return on assets has been used to assess profitability, as it illustrates how the companies used its assets to generate revenue.

$$ROA = Net income/Total assets$$
 (2)

This ratio is used by analysts and investors in the comparison of industry performance. As such, the comparison between Nike, Adidas, and Lululemon Company is ideal as the companies as of the same sector.

## **4.3.** Size

The total assets were used in the analysis of the size of each of the companies. While it is generally hypothesized that large firms enjoy economies of scale and minimize systematic risk, the analysis does not generate accurate results to support this hypothesis. This can be explained by the fact that increasing the size of firms is not related to the capital structure. Therefore, the relationship between the size of firms and the systematic risk remains unestablished. It can be argued that large firms encompass higher debt-equity ratios that are needed to cover their costs. On the contrary, large companies have more marketable assets that can be converted into cash easily and hence are not considered to be risky as they can absorb political, social, and economic management changes.

#### 4.4. Growth

Company growth is mainly assessed by net profit, earnings before interest, revenue, or asset growth. The analysis indicates that there exists a negative correlation between high growth rates and systematic risk as fast-growing businesses can cover their financial costs efficiently.

# 4.5. Financial Leverage

There exists a critical positive relationship between systematic risk and leverage, which can be inferred from the analysis. Leverage allows businesses to boost their share capital and increase business operations. Debt capital is better compared to equity capital as it is cheaper. Generally, an

increase in leverage increases ROE as the firm finances its operations compared to foreign equity. Financing benefits businesses but increases risk. A business stands on the verge of a financial loss if fails to meet its debt premiums or terms. Ideally, investing in companies with high debt-to-equity ratios involves taking a huge risk, particularly if the interest rates rise abruptly.

The major financial leverage is the liabilities to assets ratio. A higher ratio of liabilities to assets implies a higher leverage, and more debt as a proportion to the total capital of the company. The ratio also shows how investors source funds from internal and external sources. This ratio can be used by investors to assess whether a company can repay its investment or meet its current liabilities.

## 4.6. Operational Efficiency

Operational efficiency indicates how a firm can manage its assets effectively. The analysis infers a negative association between systematic risk and corporate performance. This can be explained by the fact that top performing companies manage their assets effectively and have lower risks. However, high profitability arises from aggressive strategies of investment that may increase the systematic risk, but this is often not the case. The major efficiency ratios used in the analysis include the asset turnover ratio and fixed asset turnover ratio. Companies with higher turnover were more efficient. Ideally, businesses that utilize assets effectively reduce losses and the systematic risk.

### 4.7. Valuation Measures

The analysis indicates a strong link between book-to-market value and expected returns. Higher ratios of market-to value indicated better returns. Lululemon Company had a higher book-to-market ratio and experienced higher returns.

### 5. Conclusion

The prevalent relationship between financial indicators' of firms and the systematic risk has been evaluated. The basic idea was to apply the systematic risk as a framework of beta estimation, which is commonly applied by investors and analysts. The proposed literature indicates that the main goal of firms is the maximization of capital returns, and this can be attained at low-risk levels. This model predicts systematic risk and could be applied by managers. The estimation of the systematic risk was assessed by analyzing the beta of three companies. The multiple linear regression model was used to analyze the prevalent relationship between financial indicators and the systematic risk. The analysis was conducted at a confidence level of 95% to examine which of the factors encompassed either a positive or negative correlation. This novel approach can be employed by the management of either of the companies to minimize the systematic risk and boost its financial performance, as well as investors who are interested in assessing the performance of the companies.

This paper lacks a comprehensive and sufficient consideration of the subject and object of evaluation. Most of the paper only uses financial indicators, such as the return on equity, the profit rate of main business, the growth rate of main business revenue and other hard indicators, and ignores the evaluation of intangible assets, such as the soft power of enterprise management ability and corporate culture, which leads to the imperfection of the evaluation system. Therefore, in the process of financial evaluation system construction and improvement, to attach importance to the organic combination of financial and non-financial indicators.

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