Influence of Stocks Intrinsic Valuation on Investment Decision Making: A Literature Review

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Abstract
All over the world, investment decisions are regarded as critical decisions. Investors prior to the investment decision would like to know the possible risk and returns associated with the kind of investment to be undertaken. Investors make an excellent investment decision based on facts and figures. Since an investor cannot just by looking at a stock say whether it is overvalued, undervalued or at a fair value. This study is based on a literature review determining the intrinsic value of a stock using the Discounted Cash Flow model, with a particular emphasis on the Internal Rate of Return (IRR) and Net Present Value (NPV) approaches, and their influence on investment decision-making. This study recommends that for investors to make a profitable investment decision, they must focus on investments with intrinsic value equal or higher than the market price of stocks.
Keyword: Intrinsic Value, Investment Decision Making, Discounted Cash Flow, Internal Rate of Return and Net Present Value.

Introduction

All over the world, investment decisions are regarded as critical decisions. Investors prior to the investment decision would like to know the possible risk and returns associated with the kind of investment to be undertaken. In so doing, investors might either engage the services of an investment advisor broker or even do the strategic analysis or calculations by themselves to ascertain the value of the investment. The purpose of this analysis or calculations is to determine the true and fair value of the stock they intend to invest in. Once the calculations are completed, the investor can determine whether the stock is overvalued or undervalued or at a fair value. At this realization, the investor can make a sound investment decision based on facts and figures, not just assumptions and speculations. An investor must be able to examine all types of actions that will be made or carried out while evaluating stocks or shares that will deliver the best returns on investment.

In their study, Ong, et al (2020) suggest that firms ought to achieve accurate valuation by using the appropriate valuation method to measure their intrinsic values. Investors can measure the stock's fairness by examining the intrinsic value of the stock's price. Stock

valuation is the way an investor analyses stocks to determine the stock's true value. An investor cannot just look at a stock, say whether it is overvalued, undervalued or a fair value.

Professional equity analysts' valuation estimates, and judgments play an essential role in the functioning of capital markets by influencing portfolio decisions and, consequently, share prices (Pint et al., 2019). An investment agent, also known as an investor, invests in a stock purchase offered by a company to obtain future gains while considering the risks involved.

Most researchers used the earnings per share approach to determine the intrinsic value of stocks for investment decision making. Nevertheless, in this study, we concentrated on the discounted cashflow model with major emphasis on the internal rate of Retuend (IRR) and net present value (NPV) of stocks as a measure of intrinsic value of stocks for investment decision making.

Stock Intrinsic Valuation
Anusha and Murugan (2020), refers to the intrinsic value of a stock, as a stock's true value; this is the total amount that one could make from a stock in the future. Intrinsic value is a calculated estimate of a stock's "true" value using accurate risk and return data (Utami, Limas, Ulfa & Wijaya, 2018). Although the intrinsic value can be estimated, it cannot be precisely quantified (Li, 2021). This is determined by the monetary gain you anticipate receiving in the future (Li & Miu, 2022). That is to say, it is the highest price at which one can purchase the stock without incurring a loss when one sells it.

Also, Tandelilin (2010), perceives that when it comes to stock valuation, three distinct values are recognized: a book value, a market value, and an intrinsic value. Book value is a value determined by the issuer company's accounting records. Market value is the value of shares, as determined by the stock's market price. Whereas intrinsic value, also known as a theoretical value, is the stock's actual or alleged value. Investors must be aware of these values as critical information for making sound investing selections.

Intrinsic Value and Stock Valuation
Nordin et al (2019) suggest that unlike direct property valuation, which is heterogeneous, stock valuation is relatively straightforward as all information are readily available in the market. Stock valuers, analysts, or investors can assess relevant information via the Stock Exchanges.The intrinsic value of stocks is determined by careful fundamental analysis. Fundamental analysis is a method of assessing the intrinsic value of a company's stock by looking at historical accounting and financial data. This information is available in the published annual report, official announcements, and the company's website (Nti et. al., 2020)

Stock valuation is the bedrock of the current financial system. It enables well-run businesses to command a premium in the market. On the other hand, it assures that companies with bad fundamentals see their valuations decline. Thus, the art and science of stock valuation enable the modern economic system to allocate efficiently scarce capital resources amongst various market participants. The markets receive information every moment and attempt to incorporate this information's financial impact into the stock price. Individual estimations of the effect vary, and as a result, various individuals may arrive at distinct stock values. As a

result, a difference may exist between a company's market value and what investors refer to as its true or "intrinsic value." Investors stand to profit handsomely if they accurately recognize this distinction.

Discounted Cash Flow
The Discounted Cash Flow (DCF) analysis is a commonly used valuation method to determine a company's intrinsic value. Discounted Cash Flow methodology assumes that the present range of values of the company as of the valuation date is equal to the present value of future cash flows to the company shareholders (Anusha & Murugan, 2020)

The Discounted Cash Flow (DCF) method is probably the most comprehensive approach used in company valuation, its main drawbacks being probably the known extreme sensitivity to key variables such as Weighted Average Cost of Capital (WACC) and Free Cash Flow (FCF) estimations not unquestionably obtained (Vayas-Ortega et. al., 2020).

The DCF model forecasts the future cash flow of stock and discount it to the present value by using the firm's weighted average cost of capital (WACC). The weighted average cost of capital is the expected rate of return that investors want to earn above the company's cost of capital.The DCF approach is the most frequently used model because it forms the basis of other valuation models. This model states that the value of an asset is the present value of the expected cash flow generated in the future at a specific discount rate (Sutjipto et. al., 2020).

Stock valuation with DCF has strengths and weaknesses. The benefits of this model are that it already considers everything that underlies a business, such as cost of equity, the weighted average cost of capital, growth rate, reinvestment rate, many more (Daly et. al., 2021). Additionally, we may utilize the model to analyze the shares of companies that do not pay dividends. While the weaknesses are susceptible to assumptions related to cash flow growth rates and discount rates, it is not easy to predict these changes (Daly et. al., 2021).

Internal Rate of Return and Net Present Value
The IRR and the NPV are the two most common and vital indicators in investment decisions (Guler, 2019). Although, Silva et al (2018) pointed out certain flaws of the IRR; these two indicators, however, have intrinsic differences between them. Kim and Reinschmidt (2012) corroborate that the IRR is the interest rate where the net present value of cash flows is equal to zero. The IRR is a financial indicator, and the NPV is an economic indicator of capital investment. The former gives the private investor's point of view, and the latter the society's point of view. The value of IRR varies with the change of financial arrangement of an investment. The NPV, however, does not but remains constant no matter how the financial arrangement changes.

Investor Decision Making
According to Wibowo et. al., (2019); Nasiri, et. al (2019), investment is an activity in which an investment agent can be called an investor to invest in a stock purchase issued by a company that aims to obtain future profits by considering the risks involved. Zahera and Bansal (2018) explain that investment decisions are rather sophisticated and require considerable brainstorming. Most investors are bound to make mistakes in their investment decisions as

they desire to minimize their losses. Several factors may have an impact on investment decisions.

In ensuring accurate investment decisions, Zahera and Bansal (2018) strongly suggest that investors are focused on past performance and the prospects of the investments for decision-making. Individuals and firms, including organizations, may decide whether to finance the operations using debt or equity (Ayaa & Peprah, 2021).
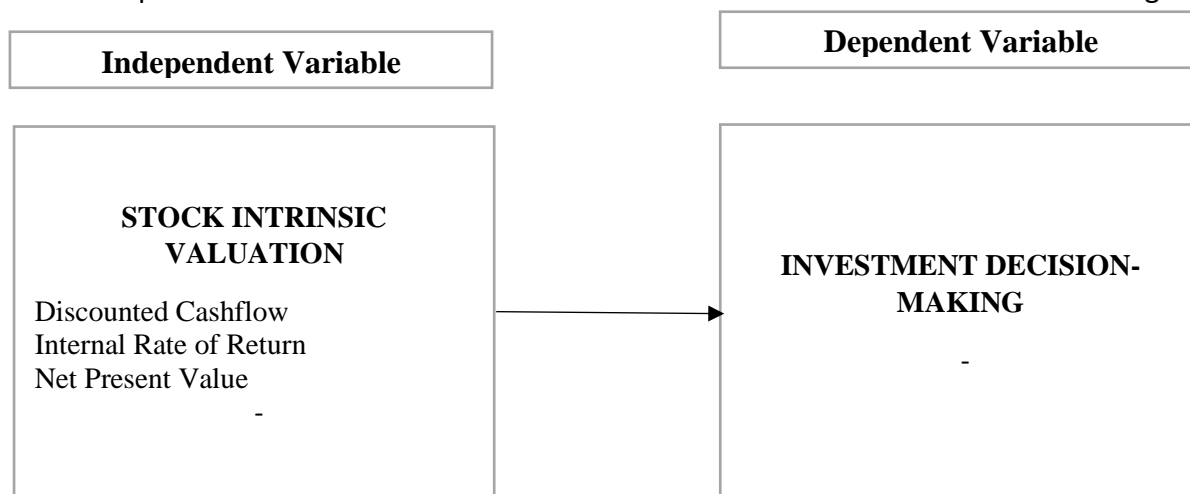
Tao, et.al (2021) postulate that investment decision making in a long-term model typically consists of three steps. First, projections are made regarding the short-run profits/rents (i.e., the revenues subtracted by the operational expenditures) that can be obtained for potential investments. Second, these projections are used to evaluate the profitability of potential investments.

The profitability is typically expressed by calculating standard metrics, such as the net present value (NPV) or the internal rate of return (IRR) (Sarsour & Sabri, 2021). In a third and final step, the most profitable investment, if any, is selected. This process is typically repeated until none of the agents is willing to invest anymore. The main challenge these models face resides in the first step, i.e., designing a suitable method that allows the agents to make projections of future revenue/price streams (Kirchain, et. al., 2019). Whereas existing agent-based models align with the metrics and criteria used for making an investment decision (e.g., a non-negative NPV or a minimum IRR), the methods used in different existing long-term agent-based models to project future prices or revenue streams vary enormously. The study posits following research questions and null hypotheses below:

Conceptual Framework

Figure 1.

The Conceptual framework of stock intrinsic valuation on investmement decision-making.

Independent Variable	Dependent Variable
STOCK INTRINSIC VALUATION Discounted Cashflow Internal Rate of Return Net Present Value -	**INVESTMENT DECISION-MAKING** -

Research Question

Is there a significant relationship between stocks' intrinsic value and investment decision-making?

Null Hypothesis

There is no significant relationship between stocks' intrinsic value and investment decision-making.

Conclusion

An investor's primary objective is to profit from capital gains or yields on their investment. Inventors, very much aware of the risks they are undertaking, will have an expected return in mind from the Commencement of the investment decision. The investors' ability to accurately estimate risk and expected returns sets them apart for a rewarding investment. An individual or corporate investor's advantage will be the techniques deployed to determine the intrinsic value of an investment. An investor's choice of using the Discounted Cashflow model would appropriately calculate the stock's intrinsic value. IRR and NPV, as a technique under the DCF model, both takes into consideration the time value of money and focus on high yielding stocks or investments.

This paper contributes to the literature on determinants of investment decision making, where we find that investors' confidence is dependent on a stock's intrinsic value in the capital market.

Recommendation

For investors, be it institutional or individual, to make a profitable investment decision, the intrinsic value of the stock or investment, when greater than the stock's market price, means that stock is undervalued and must invest in it that stock. Also, when the intrinsic value is less than the market price, the investor must sell or not invest in that stock since it is an overpriced stock. However, when the intrinsic value is equal to the market price, it means that stock is fairly priced and must hold on to it. This study recommends that for investors to make a profitable investment decision, they must focus on investments with intrinsic value equal or higher than the market price of stocks.

Furthermore, this paper aligns itself with many researchers such as (Sutjipto et al., 2021), Jumran & Hendrawan (2021); Konek (2021), who have investigated the use of the Discounted Cashflow model as a measure of intrinsic value and concludes that the Internal Rate of return (IRR) and Net Present Value (NPV) are major estimators of the intrinsic value of stocks which significantly influence investment decision making.

The study further recommends that empirical research be further examined to determine if stocks' intrinsic value with a mediating impact of investment size will influence investment decision making.

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