


# An Analysis of Pecking Order Theory With the Analytic Hierarchy Process

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## ABSTRACT

According to pecking order theory (POT), when a company feels the need for capital, it applies the hierarchies of accounts payable and accruals, retained earnings, debt, and new common stock. Similarly, the analytic hierarchy process (AHP) method calculates the hierarchical priorities for the solution of complex problems. The most important justification explaining the hierarchy implementation of the POT approach are the impacts of asymmetrical information and signaling. Similarly, in the AHP method, the hierarchical decision-making process depends on the justification of the decision maker. The existence of asymmetrical information shows that the two methods complete each other. The aim of the study was to analyze POT with the AHP method, in other words, an examination of the consistency of the POT and AHP approaches with each other. The results showed that the two methods are indeed consistent with each other.

## KEYWORDS

Accounts Payable and Accruals, Asymmetric Information, Decision Maker, Debt, Firm, New Common Stock, Retained Earnings, Signal Effect

## INTRODUCTION

A company needs a financing source when it reaches an investment decision. Financing sources are mainly provided in two ways, debt and equity capital. Financing with debt has two advantages when compared to equity capital. First, the paid interest expenses are deducted from the tax base when financing is provided with debt, and a tax advantage is provided. Second, existing partners will get more of a share from the newly created higher earnings when the investment is carried out successfully. When considered from this perspective, the tax advantage of the debt and the stationary state of the existing partners provide flexibility to the companies regarding the use of financing with debt. On the other hand, a modification for excessive indebtedness and tax policy affects the financing source.

There are many capital structure theorems explaining financing decisions; pecking order theory (POT) is one of them. POT asserts the view that managers have a preferred hierarchical order, and this order affects capital structure decisions. Companies generally use the financing source in the following order: first, accounts payable and accruals; second, retained earnings; third, financing with debt; and finally, the export of new common stock. However, flotation expenses are too high for the

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export of new stocks, and the impacts of asymmetrical information and signaling makes it hard to provide financing with new common stock.

POT explains the issue of leverage use by companies. According to POT, companies prefer internal to external financing. When external funds are necessary, companies prefer debt to equity capital. Due to the expense, equity capital is rarely used. POT states that the use of external financing by companies is a natural process. In this respect, it specifies that external financing forms a very small part of the provision of financing and that the majority of external financing is met by debt because of the expensiveness of the use of equity capital.

Myers & Majluf (1984) asserted that companies prefer that their profits be used for re-investment to avoid problems of negative selection. When these funds are exhausted, companies provide financing with bank debt and from the stock market. This situation shows the flexibility of the hierarchical order and the fact that internal sources have lower transactional expenses than external sources. An information asymmetry model is formed upon the assumption that the company managers act on behalf of the existent shareholders. If companies have sufficient financial sources, they carry out all the investments whose current net value is positive. If external funds are needed to finance new investments, the market will think that their shares have excessively increased in value with a resulting negative impact on the share price. If the company does not have sufficient funds to finance new investments, Myers & Majluf (1984) assert that they will outflow equity capital only when there are very profitable investments.

According to PO, a company always meets its need for external financing with debt as long as it is not limited to a certain debt capacity. When a company wants to get the stocks and shares back and have a debt ratio above its target, the theory foresees that the company will purchase its debt back. Managers have more knowledge about the real value of the company and the riskiness of the company when compared to external investors. Managers try to finance new investments using capital such as internal funds or risk-free debts. POT explains why companies tend to be dependent on internal sources and prefer debt to equity capital when external financing is necessary.

According to Baskin (1989), the main idea of POT is very simple. Companies take on debt when they need funds. When asymmetric information brings limitations to the financing of equity capital, debt tend to be the primary financing source. The expenses of bankruptcy limit indebtedness. The supply of debt funds in large, mature companies are seen to be more flexible than equity capital. This relationship is consistent with asymmetric information. Along with understanding the results of asymmetric information, it is possible to use POT behavior not only for tax and transaction expenses but also as a rational signaling balance. Asymmetric information not only prevents companies from collecting funds through the issuing of new stocks, but it also limits access to retained dividends.

Allen (1993) asserts that hierarchy theory shows a hierarchy of preferences depending on the financing sources of the companies. This situation is the result of the existence of asymmetric information. The administration is assumed to have more knowledge about the value of the company than the potential investors. This situation may cause the companies to reject the issuing of stocks. For this reason, they may miss valuable investment opportunities. In this situation, companies will prefer to provide funds with retained earnings, avoiding new equity capital problems. The indebtedness level occurs between the desired investment and the retained earnings. POT asserts that there should be a negative relationship between debt ratios and profitability.

There is no adverse selection problem in retained earnings. In contrast, stock has serious adverse selection problems. Financing with debt has few adverse selection problems. Equity capital is riskier than debt in terms of the investors. The risk premium is higher for equity capital; therefore, investors demand an equity capital income higher than the debt. This situation facilitates the performance of financing with debt.

The analytic hierarchy process (AHP) was developed by Thomas. L. Saaty between 1971-1975. Saaty (1987) deals with the measurement of both physical and psychological phenomena. He asserts that while physical expression refers to concrete things (material assets), psychological expression is

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