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The Income Method of Valuation: A False Analogy between Bonds and Stocks

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The income method of valuation assumes that risk plays a critical role in determining how much an investor is willing to pay for a particular investment. Under the theory, an investor faced with two investments offering equivalent future cash flows will pay less for the riskier of the two investments. This is equivalent to an investor demanding a higher rate of return on riskier investments (because rate of return equals the net cash flow divided by the amount invested). Sometimes proponents of the income method acknowledge that real world investors actually do not behave in this way. However, these proponents stipulate that rational investors should consider risk in making investment decisions.

From a practical standpoint, the income method of valuation, as an investment valuation model, makes a great deal of sense when applied to the valuation of fixed income securities such as bonds. However, these ideas become impractical when applied to the valuation of equities. The attempt to apply the same type of pricing model to both types of investments fails to take into account the fundamental differences between them.

Why? First consider the idea of investors demanding or expecting a certain rate of return on a future income stream. Under the income valuation model, in order to price an investment an investor has to have a reasonably good idea of the investment’s likely future cash flows. In the case of bonds, this is relatively easy because the future cash flows are exactly specified in an indenture agreement. However, an investor’s ability to formulate relatively precise projections of future cash flows for bonds is significantly greater than for equity investments.

Unlike bonds, equities make no promise to return any specific future cash flow. Future cash flows from equities will be related to the profitability of the company. The degree of profitability will depend upon variables such as:

- Market share and increases and decreases in competition
- Changes in demand for the products or services provided by the company
- Efficiency of management
- Effectiveness in marketing
- Technological innovation
- General macroeconomic factors such as GDP growth or decline, fiscal and monetary policy

Beyond a very short time frame, it is unrealistic to expect investors (or for that matter any valuation...
experts) to be capable of accurately assessing these variables. Yet, knowledge of these variables is required to form an accurate projection of future cash flows.

Now let’s turn to the question of the required rate of return and its relationship to risk.

The risk of investing in a bond is primarily that the interest and principal payments will not be made as promised in the indenture agreement and that changes in inflation and interest rates will adversely affect the real value of future cash flows. The risk of default is measurable in a relatively straightforward manner. Rating services routinely assess the credit worthiness and the risk associated with a large variety of government and corporate bonds. These services utilize credit history, analysis of various financial statement ratios, and assessment of the collateral value of assets held by the bond issuer. In considering the collateral value of a lender’s assets, the greatest weight is given to those tangible assets that are most easily appraised. While bond risk assessments are not perfect, they are relatively objective and understandable.

Compare the ability of an investor to assess the risk associated with a future cash flow from a bond with the risk associated with achieving a future cash flow from equity (assuming, for the sake of argument, that the investor can even make a relatively reliable cash flow estimate).

Neither investors nor their expert advisors can simply look at a company’s balance sheet and assess the risks associated with achieving a future projected cash flow. In considering the future profitability of a company, the assets that matter most in generating earnings tend to be the assets hardest to appraise: goodwill, trademarks, patents, copyrights, licensing agreements, work force skill and expertise, and product diversity. These assets will have the greatest bearing on profitability, but none are as amenable to objective measurement as the tangible assets utilized in measuring the credit worthiness of an enterprise’s bonds.

Can equity investors compare the risk associated with expected cash flows from different equity investments? Are there widely understood and agreed upon measures of risk associated with these expected cash flows?

Modern Portfolio Theory and the income method of valuation have labored heroically to develop such measures. One measure the theory has tried to peddle as a direct measure of comparative risk is the beta. But the reliability of beta as a direct measure of risk is controversial. Consider what Pratt, Reilly, and Schweih's have to say about betas as a useful tool in the real world:

Is there a variability measurement that can identify stocks that go up more than the market when the market goes up, and down less than the market when the market goes down? Unfortunately, the answer is no. This is because research shows that stocks that have demonstrated such a pattern in the past do not tend to continue to demonstrate the same pattern in the future.¹

The authors outline several other problems with the beta measurement. In fact, debating the pros and cons of various beta measures is a favorite pastime of academically inclined proponents of the income method. These sometimes heated, and often boring, debates demonstrate that measuring the comparative risks of realizing expected cash flows from different equity investments is simply not as straightforward a proposition as assessing the comparative risks associated with different bond issues.

Bond investors can operate under the tenets of the income method because they can predict fairly accurately future cash flows and reliably assess the risks associated with realizing these returns.
Investors in equities, on the other hand, cannot operate under these principles because, as a practical matter, they can do neither. In the real world, what investors cannot do, they do not do.

Valuation of equity interests simply cannot be reduced to the level of mathematical precision that the income method advertises. This is because of the inherent difficulty in formulating accurate projections of future cash flows and the near impossibility of developing reliable measures of comparative risk associated with those projections.

By lumping bond and equity investments together and not paying sufficient attention to the fundamental differences between the two, the income method of valuation overstates the role of risk in valuing equities simply because it is so important in valuing bonds. In the real world of equity investment the assessment of risk will be a far more intuitive and less influential component of the decision making process than the theory predicts or stipulates that it should be.

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