Capital Structure Theory - No Tax World

We examine capital structure under strict simplifying assumptions. This allows us to examine the basic effects of leverage in a simplified environment. Then we add back market imperfections one by one, such as agency conflicts and bankruptcy costs, in an attempt to understand how each of them affects capital structure. This helps us explain the capital structure we see in the real world.

Franco Modigliani and Merton Miller published a seminal paper on capital structure in 1958. (See American Economic Review, June 1958) Under a set of fairly restrictive assumptions, they showed that capital structure does not affect firm value. We will review the basics of their model below.

Assumptions of the Modigliani-Miller Model

Firms can issue only two types of securities - risky (common) equity and (straight) debt to finance their investments.

Firms own all physical assets of homogenous business risk class through their exogeneous investment decisions. This assumption ensures that investment decisions precede financing decisions and investment related cash flows are not affected by the firm's financing decision, i.e., its choice of capital structure.

Perpetual Cash Flows: Zero growth is assumed for EBIT. This means that EBIT can be valued as a perpetuity that simplifies the analysis in our learning process.

Frictionless Capital Markets:

- Equal access to all relevant information, i.e., no information asymmetry on growth options
- No transaction costs
- No bankruptcy costs
- No taxes

Firms and investors can borrow/lend at the same risk-free rate.

Note – It's ok with risky debt as long as firms and individuals can borrow or lend at the same interest rate, i.e., **homemade leverage/unleverage is allowed**! This is the most critical assumption that allows the use of Capital Structure Arbitrage to realign the valuation of firms adopting different capital structures.