Asymmetric Information and Signalling

Managers may be better informed about a firm's investment prospects than outside investors. If we assume this is true, we are assuming information asymmetry. Under information asymmetry, investors watch corporate decisions for signals of manager beliefs about firm prospects. One decision investors watch carefully is the decision to obtain new debt capital.

Investors view the debt level as a signal of firm value. Firms with low anticipated profits will take on a low level of debt as they concern their capacity to cover the debt obligation. Firms with high anticipated profits will take on a high level of debt as they are confident in meeting the higher debt obligation. Less quality firms that take on more debt than the optimal level in order to fool investors will pay the price in the long run. Signaling costs could take the form of bankruptcy (financial distress) costs when less quality firms fail to meet the higher debt obligation associated with their attempt to mimic the debt level of better quality firms.

Asymmetric Information and the Pecking-Order Theory

Managers may obtain additional capital by issuing new stock or borrowing funds. If new stock is issued, then the original stockholders benefit from issuing the new stock to investors at as high a price as possible. If managers issue new stock at too low a price, then value is shifted from the existing stockholders to the new stockholders.

In an information asymmetry world where managers are better informed than investors, managers, acting for stockholders, are expected to avoid issuing stock when they believe it is undervalued. Thus, when a stock issue is announced, investors are likely to take this news as a signal from firm managers that the firm's stock is overvalued. Thus investors will react to the equity issuance negatively, increasing the issuance cost of external equity. Empirical studies have shown that firms are more likely to issue equity after a stock price run-up than after periods of stock price stability or decline. And empirical findings also consistently show that stock price falls upon announcement of plans to issue common stock.

The **pecking order theory** (see Stewart Myers, "The Capital Structure Puzzle", *Journal of Finance,* 1984) says that managers avoid seeking external capital by financing with internally generated funds first, then issue debt if they need to raise additional capital. If the firm is at maximum debt capacity and still needs additional capital, then equity would be issued as a last resort. Accoding to this theory, managers try to avoid issuing equity because it sends a negative signal about firm value to investors. In summary, **the hierarchy (pecking order)**

of financing sources: internal funds > safe debt > risky debt > quasi-equity (e.g., convertibles and preferred stocks) > equity!

There are several implications of the **pecking order theory**. First, there is no target debt level. The debt level depends on the amount of new retained earnings available and the projects available. Second, the most profitable firms have the least debt since they are able to do most of their financing with internally generated cash flow. Third, managers have incentives to accumulate cash for use on future projects. This is called building up financial slack. If financial slack is available, managers can more easily avoid issuing equity. This is desirable since the announcement of an equity issue is perceived as a signal that the firm's stock is overvalued. If a firm has to raise external capital, it will time the announcement when the associated capital market condition is the most favorable. For instance, a firm will issue stocks when the stock market is hot under which stocks are more likely overvalued and hence the negative impact of the announcement on firm valuation can be minimized.