Corporate Finance, Module 12, "Financing Decisions and Market Efficiency"

Readings for the Fourteenth Edition (2022) of the Brealey, Myers, Allen, and Edmans text

(The attached PDF file has better formatting.)

The sections in this posting are for the *fourteenth* edition of the Brealey, Myers, Allen, and Edmans text. You may also use the seventh through thirteenth editions; final exam problems can be answered from any edition.

{The Brealey, Myers, Allen, and Edmans textbook is excellent. We say to read certain sections and to skip others. This does not mean that certain sections are better; it means that the homework assignments and exam problems are based on the sections that you must read for this course. Some of the skipped sections are fascinating, but they are not tested.}

Read the introduction on pages 319-320; market efficiency is a core concept in the text. If the capitalization rate and future cash flows can be estimated, we can derive the net present value of a project. To guide a firm's financing and investment decisions, we must know where positive net present values come from.

Read section 12-1 "Differences between Investment and Financing Decisions." The textbook explains that "it's much harder for a company to find positive-NPV financing strategies than positive-NPV investment strategies"; capital markets are so efficient that positive NPV financing is unlikely. The concepts are important and mis-understood by many firms, who assume that financing decisions affect the value of the firm. For instance, the CFO may believe that the value of the firm differs, depending on whether it is funded by stock or by debt. An insurer may set up a holding company to borrow money in the capital markets, instead of using equity financing. Some insurers even say that insurance markets are competitive, all insurers underwrite the same way, and the critical differences among insurers is their financing decisions, not their underwriting abilities. That is not true; in perfect capital markets, financing decisions are largely irrelevant.

Question: Why are insurers – like other firms – so concerned about financing? The CEO may leave product pricing decisions to an actuary or an underwriter, but he or she carefully reviews how the firm raises capital.

Answer: Imperfections in the capital markets allow differences between financing methods. The imperfections refer to federal income taxes (and tax differences by investor and by investment vehicle), expenses, costs of bankruptcy, and similar matters. An error by a pricing actuary is usually minor. But a CFO who pays 1% more than necessary on a \$100 million loan costs the company \$1 million a year.

Read the subsection "The NPV of Financing Decisions Is Zero in Efficient Markets" on page 329. In efficient markets, the *net present value of borrowing* is zero. Some countries or states may offer subsidized loans to companies to bring jobs, and sometimes lenders mis-estimate risk. But mis-estimates are rare; lenders who charge below market rates don't last long.

Read section 12-2 "The Efficient Market Hypothesis." Focus on the subsection "Forms of Market Efficiency" on pages 331-334. Know the three forms: strong, semi-strong, and weak, which are tested on the final exam.

Question: The weak form of market efficiency says that charts of past price movements don't help predict future price movements. Do investment firms agree with this?

Answer: Most investment firms agree with the market efficiency hypotheses.

Question: But I have seen investment firm weekly publications that show page after page of common stock price charts. An annual subscription costs \$3,000. If this publication is worthless, why is it produced?

Answer: even if the publication is worthless, the investment firm produces it because a thousand investors buy it. Whether the charts predict stock prices is a financial question; stock market efficiency says no. Whether the firm should produce the publication is a question of supply and demand; the answer is yes.

Question: I assume that investors would do better reading the accounting statements of firms.

Answer: The semi-strong form of market efficiency says they would not do better. All the information than can be extracted from accounting statements is already impounded in stock prices. Thousands of investors are analyzing accounting statements of each firm; many of these investors are professional fund managers. An individual investors has no advantage; in fact, an individual investor is at an enormous disadvantage, since he or she gets information much later than fund managers get information. Market efficiency says that the individual investor poring over accounting statements is wasting time.

Read section 12-3 "Implications of Market Efficiency." The textbook takes a dim view of professional fund managers, but perhaps an accurate one. The advertisements on Google Youtube promising high returns from risk less investments are clearly aimed at suckers; the textbook says that the advice of some high social class investment advisors is aimed at high social class suckers.

Read the subsection "Event Studies and Abnormal Returns" on pages 340-341 and equation 12.3 on page 340. A final exam problem may give the risk-free rate, the CAPM β for a stock, the return on the market, and the stock's actual return, and ask you compute the abnormal return.

Read the subsection "Firm Financing Decisions Neither Create Nor Destroy Value" on pages 341-342, which builds on the earlier conclusions. Skim the subsection "What if Markets Are Not Efficient? Implications for the Financial Manager."

The section 12-4 "Are Markets Efficient? The Evidence" is fascinating. We hear of friends who made fortunes by stock market investments; is it really all random? The textbook presents the evidence on both sides. The final exam does not test this section, which has no firm conclusions, so you can skip it if you want.

Skip Section 13.5, "Behavioral Finance." Economists say that investors are rational actors; psychologists and sociologists say they are irrational persons with biases and fast beliefs. But behavioral finance rarely helps make better business decisions.

The *key takeaways* at the end of this chapter give you a good understanding of the stock market. Much of the advertising by brokerage firms is geared to what consumers what to believe, not financial truth. Consumers want to believe that with a little help, they can make high returns from the stock market. Brokerage firms are happy to take their money. Brealey and Myers say that some of their services are worthless.

Review end of chapter problems 1, 2, 3, 4, 12, 15, 18.

Illustrative test questions, problems, and homework assignments are shown separately on the discussion forum.