# **Chapter 13 Efficient Markets and Behavioral Finance**

### **OVERVIEW**

This chapter is essential reading for students of corporate finance. Financing decisions involve the firm directly raising funds in capital markets. Capital markets generally *work well*; the initial part of the chapter is on market efficiency. There is a distinction between a perfectly competitive market and an efficient market. Perfection implies the absence of frictions such as taxes or transaction costs. Efficiency implies only that prices fully reflect available information. It describes three levels of market efficiency and discusses empirical efficiency to show that, generally, markets are efficient. This chapter discusses behavioral finance which has developed to explain the anomalies and market bubbles like the one that occurred during the 1990s. Studies of "behavioral finance" show that individual investors have built-in biases and misperceptions that can veer prices away from fundamental values for prolonged periods of time. The chapter concludes with several lessons that are derived from the discussion of market efficiency.

### LEARNING OBJECTIVES

- To understand the concept of market efficiency
- To enable the student to identify and analyze instances of weak, semi-strong and strong forms of efficiency

#### We always come back to NPV

NPV works just as well when a firm raises money as when it spends it. However, financing decisions are different from investment decisions in several respects:

- Financing decisions require more knowledge of institutional detail
- Financing decisions are often easier to reverse
- It's hard to find financing schemes with positive NPVs

Point three leads to the concept of efficient capital markets: if capital markets are efficient, then purchase or sale of any security at the prevailing market price is never a positive-NPV transaction.

### What is an efficient market?

The history of the efficient-market theory traces its beginnings in the random-walk literature. A theory was developed to explain the facts. The theory was formalised in weak, semi-strong, and strong forms. Some common misconceptions are noted. For example, randomness is often confused with irrationality even through randomness is the predicated *result* of rational valuation. The textbook discusses numerous studies that provide evidence to support the efficient-market hypothesis, particularly in the weak and semi-strong forms. The textbook also discusses some of the exceptions to the efficient-market hypothesis.

#### Behavioral finance

The key to the discussion on behavioral finance is to not focus on it as a science with theories and hypothesis to be tested. Behavioral finance is more of a criticism of efficient markets than a stand-alone concept. Without the Efficient Market Hypothesis (EMH), behavioral finance would not exist. The best approach is to present behavioral finance as offering explanations to fill the gaps in the EMH. Where the EMH does not hold, what are the possible explanations?

## The five lessons of market efficiency

These lessons are:

- Markets have no memory. Follows directly from the random-walk literature.
- Trust market prices. In an efficient market you can trust prices because they reflect all available information. For example, it is very difficult for portfolio managers to achieve better-than-average risk-adjusted performance by identifying over- or under-priced stocks.
- Reading the entrails. Because they impound all available information, security prices can tell us a lot about the future if we can interpret them properly. The stock market is a good leading indicator of economic activity, for example.
- The do-it-yourself alternative. In an efficient market, investors will not pay others for what they can do themselves.
- Seen one stock, seen them all. "You can sell large blocks of stock at close to the market price as long as you can convince other investors that you have no private information."