

ANSWERS TO STUDY QUESTIONS

Chapter 7

- 7.1. The two mutually exclusive objectives of investors are:
- The growth or savings objective, which implies a relatively long time horizon with no immediate or likely intermediate need to use the cash being invested.
 - The income or current cash flow objective, which implies that the investor has a short-term and ongoing need to use cash generated from the investment.
- 7.3. The following list summarizes the major constraints and concerns that affect most investors:
- Risk: The possibility that future investment performance may vary over time in a manner that is not entirely predictable at the time when the investment is made.
- Liquidity: The ability to sell and buy investment assets quickly at full value and without much affecting the price of the assets.
- Time Horizon: The future time over which the investor's objectives, constraints, and concerns are relevant.
- Investor Expertise and Management Burden: How much knowledge, ability, and desire the investor has to manage the investment process and the investment assets.
- Investor Size: How "big" the investor is in terms of the amount of capital in need of investment.
- Capital Constraint: Whether the investor faces an absolute constraint on the amount of capital available to invest, or can obtain additional capital relatively easily if good investment opportunities are available (e.g., from stockholders or depositors).
- 7.5. The possibility of direct ownership of underlying physical assets that are not too large enables a well-functioning asset market to exist trading the underlying physical assets directly. This is the commercial property asset market. This differs from the typical mainstream industrial corporate situation, in which there is generally not a well-functioning asset market trading the underlying physical assets directly. If there were such, then the market values for the underlying assets, which one could observe in the market that directly trades those assets, would be important information to help the corporation know whether they should invest the necessary funds to expand by buying or building additional physical assets. For example, if it would cost the corporation \$10 million to build a new blast furnace itself, but it were possible to buy a new blast furnace in the "blast furnace market" for \$9 million, then it would not make sense for the corporation to build a new one themselves.
- 7.7. a. The performance of REITs could differ from that direct property because the risk and return characteristics of the REIT reflect the characteristics of the REIT's management, including the stock market's perception of their abilities and future opportunities. Furthermore, REIT share values reflect the functioning and valuation of the stock market rather than that of the direct property asset market, at least in the short run.
- b. Securitization significantly increases liquidity and informational efficiency in the real estate investment industry. This allows asset prices to adjust quickly to news relevant to their value. This implies that such assets would have greater price volatility. Since the stock market is more informationally efficient than the private property market, REIT share prices respond more quickly and completely to news relevant to their

- value. In addition, the stock market is subject to fads or overreaction, which may also lead to excess volatility in the short run.
- c. Due to greater informational efficiency in the stock market, the REIT market would tend to lead the private market by adjusting more quickly to new news.
- 7.9. Referring to the total returns chart in Exhibit 7-7, we see that real estate, had the best performance from the 1970s until the mid 1980s. From 1986 to 2003, the stock market gave the best performance.
- 7.11. The average total return corresponds closely to the magnitude of volatility, meaning that greater risk is associated with greater average returns over time, and lower average returns are associated with more stability in those returns across time.
- 7.13. The major institutional sources of capital for commercial real estate in the mid 2000s included commercial banks (especially for development capital in the form of construction loans), life insurance companies, pension funds, and public market vehicles including REITs and CMBS (some of whose investment comes from institutions such as mutual funds and pension funds). During the 1990s, the public market vehicles greatly increased their relative importance.
- 7.15. REIT and CMBS markets can improve the efficiency of the capital markets by playing their role as a negative feedback loop, or regulator of overall capital flow to the real estate system. A sharp pullback in the REIT and CMBS markets occurred during 1998 as a result of the Russian and Asian sovereign debt defaults and follow-on financial strains in the United States. This pullback temporarily cut off a part of the money flow to new real estate development projects, thereby heading off what had begun to appear to some as the beginning of a new round of overbuilding in some markets.