Chapter 1 - The Investment Environment

Richard Herron

D'Amore-McKim School of Business, Northeastern University

Real assets generate income, whereas financial assets allocate income to investors

- Real assets
  - Produce goods and services
  - Tangible or intangible
  - Examples: Buildings, land, machines, and intellectual property
- Financial assets
  - Claims to the income generated by real assets (or income from the government)
  - Do not directly goods and services
  - Examples: Stocks and bonds

There are three broad types of financial assets: fixed income, equity, and derivatives

- Fixed income securities: Promise a stream of income
- Equity: Represents an ownership share in a firm
- Derivative securities: Promise a payoff derived from financial variables, such as stock prices, interest rates, or exchange rates
- Other financial markets:
    - Currencies
    - Commodities

a. Which of the following are real assets?

Check all that apply:

- [ ] Corporate bond
- [ ] Factory
- [ ] Machine
- [ ] Patent
- [ ] Plot of land

a. Which of the following are financial assets?

Check all that apply:

- [ ] $100 note
- [ ] Bank loan
- [ ] Machine
- [ ] Patent
- [ ] Share of stock

Financial assets help investors benefit from real assets

- Aggregate information
  - Stock prices reflect collective assessments of current and future performance
  - This reflection helps allocate capital to its best use
- Time consumption
  - Investing moves money from today to the future
  - Financing moves money from the future to today
- Allocate risk
  - Real assets have risk
  - Financial assets allocate this risk to investors who can bear it
- Separate ownership and management
  - Owners hire managers to run firms, leading to principal-agent conflicts
  - Principal-agent conflicts are when agents pursue their interests instead of those of the principals

We can mitigate agency conflicts but not eliminate them

- Executive compensation plans align manager wealth and owner wealth
- Boards of directors monitor managers
- Investors and analysts monitor managers
- New investors take over poor-performing firms

Investors use asset allocation and security selection to buy portfolios of assets

- Asset allocation chooses broad asset classes: stocks, bonds, real estate, commodities, etc.
- Security selection chooses specific investments: Apple common stock, 30-year Treasuries, commercial real estate in Boston, gold, etc.
- Portfolio construction approaches
  - Top-down: Allocate assets first, then select securities
  - Bottom-up: Select attractively-priced securities first, with or without an asset allocation target

Competitive markets have two implications

1. Risk-return trade-off
   - All else equal, investors want low risk and high expected returns
   - If low-risk and high-expected-return assets existed, investors would buy them, pushing up prices until expected returns fell
   - *Therefore, higher-risk assets offer higher expected returns than lower-risk assets*
2. Efficient markets
   - Security markets are typically "informationally efficient," and market prices quickly incorporate new information
   - *Therefore, market prices are consensus estimates of intrinsic values*

However, the Grossman and Stiglitz (1980) paradox highlights that perfectly efficient markets are impossible

- If prices perfectly reflected all information, collecting and trading on information would not be profitable
- Therefore, small mispricings would not be eliminated because the cost of collecting and trading on information would exceed the benefit of profiting from small mispricings
- We assume market efficiency as a baseline, but markets are not perfectly efficient
- Market efficiency affects the choice between active and passive investment management
    - Active: Searches for mispriced securities
    - Passive: Holds a highly diversified portfolio instead of searching for mispriced securities

a. In general, an asset with higher expected return _____.

- is less expensive
- is more expensive
- has lower risk
- has higher risk

a. Which of the following is true about passive vs active management?

- ○ Active managers usually allocate their capital between one or more index funds.
- ○ Active managers usually allocate their capital to a fixed risky portfolio and change their allocations only as a result of changes in their risk tolerance.
- ○ Active managers usually try to achieve returns higher than commensurate with risk by identifying mispriced assets.
- ○ Passive managers usually engage in both market timing and security selection.
- ○ Passive managers usually engage in market timing.

b. _____ refers to the attempt to identify mispriced securities or to predict broad market trends.

- ○ Active management
- ○ Asset allocation
- ○ Passive management
- ○ Security selection

There are three major players in financial markets: firms, households, and governments

- Firms: Net demanders of capital, which they invest in real assets to generate income for investors
- Households: Typically net suppliers of capital, which they invest in firms and governments
- Governments: Borrowers or lenders of capital, depending on the timing

Financial intermediaries connect capital suppliers and demanders

- Balance sheets of financial intermediaries are largely financial assets
- Examples: Investment companies, insurance companies, and credit unions
- Advantages: Pool investor resources, diversify assets, and achieve economies of scale

There are several other participants in financial markets

- Investment bankers
  - Underwrite public securities to help firms raise capital
  - Provide corporate-finance consulting that is too expensive for firms to provide themselves
- Venture capital (VC) and private equity (PE)
  - VC provides early capital (and advice and expertise) to firms too young to issue public securities
  - PE provides capital (and advice and expertise) to firms too mismanaged to issue public securities
- Fintech
  - Technology that provides financial intermediation
  - Examples: Peer-to-peer lending, robo advisors, blockchains, and cryptocurrencies

You should read (and re-read) our textbook!

- BKM (2023) provide more wisdom than we can cover in class
- Reading (and re-reading) will strengthen your understanding of finance
- Plus, your future boss will have it on her bookshelf!
- We plan to cover most of Parts 1, 2, 3, and 4, plus Chapter 24

Summary

1. Real assets create wealth. Financial assets represent claims to parts or all of that wealth. Financial assets determine how the ownership of real assets is distributed among investors.
2. Financial assets can be categorized as fixed income, equity, or derivative instruments. Top-down portfolio construction techniques start with the asset allocation decision–the allocation of funds across broad asset classes–and then progress to more specific security-selection decisions.
3. Competition in financial markets leads to a risk–return trade-off, in which securities that offer higher expected rates of return also impose greater risks on investors. The presence of risk, however, implies that actual returns can differ considerably from expected returns at the beginning of the investment period. Competition among security analysts also promotes financial markets that are nearly informationally efficient, meaning that prices reflect all available information concerning the value of the security. Passive investment strategies may make sense in nearly efficient markets.
4. Financial intermediaries pool investor funds and invest them. Their services are in demand because small investors cannot efficiently gather information, diversify, and monitor portfolios. The financial intermediary sells its own securities to the small investors. The intermediary invests the funds thus raised, uses the proceeds to pay back the small investors, and profits from the difference (the spread).
5. Investment banking brings efficiency to corporate fund-raising. Investment bankers develop expertise in pricing new issues and in marketing them to investors. By the end of 2008, all the major stand-alone U.S. investment banks had been absorbed into commercial banks or had reorganized themselves into bank holding companies. In Europe, where universal banking had never been prohibited, large banks had long maintained both commercial and investment banking divisions.
6. The financial crisis of 2008 demonstrated the importance of systemic risk. Systemic risk can be limited by transparency that allows traders and investors to assess the risk of their counterparties; capital requirements to prevent trading participants from being brought down by potential losses; frequent settlement of gains or losses to prevent losses from accumulating beyond an institution's ability to bear them; incentives to discourage excessive risk taking; and accurate and unbiased analysis by those charged with evaluating security risk.

Figure 1: Chapter 1 summary from BKM (2023)

References I

Bodie, Zvi, Alex Kane, and Allan J. Marcus (2023). *Investments*. 13th ed. New York: McGraw Hill.

Grossman, Sanford J. and Joseph E. Stiglitz (1980). "On the Impossibility of Informationally Efficient Markets". In: *The American Economic Review* 70.3, pp. 393–408.