Lecture Note

Investment Banks, Securities Firms, and Investment Companies

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April 6, 2020

1 Overview

- There are several types of financial institutions that help capital markets work properly: investment bank, securities firm, and investment company.
- Investment banking involves market analysis, advising, securities pricing, underwriting, distribution of newly created securities and venture capital.
  - Investment banks often create formal or informal syndicates to assist in sharing risk and expertise.
- Securities firms provide brokerage, research and advising services and trade securities for their own account.
- Investment companies are financial institutions that pool the financial resources of individuals and companies and invest those resources in diversified portfolios of assets.
  - An investor of funds can reduce portfolio risk through diversification at a lower cost even if the amount of money available to invest is not large.
  - Another economic function is the reduced cost of contracting and processing information.
  - There are also several advantages: the professional management, liquidity, and a variety of funds available.

2 Securities Firm and Investment Bank Activity Areas

2.1 Investment Banking

- Investment banking is underwriting and distributing new issues of debt and equity.
- Placement methods:

- Firm commitment: The underwriter buys the issue from the issuer at a set price called the bid price and then attempts to sell the issue to the final buyers at a slightly higher amount called the offer price. The investment banker bears the risk of a failed issue if it does not sell.
- Best efforts: The investment banker agrees to market and distribute the issue and use their "best efforts" to sell the issue to the public.
- Private placements: Issues sold to a few large primarily institutional investors are termed private placements.

* Investment bankers help find merger partners, underwrite new securities to be issued as a result of a restructuring or acquisition, assess the value of a potential target, recommend takeover terms, or assist in fighting off a hostile takeover.

2.2 Market Making

- Market making is creating a secondary market for securities or contracts.
- These involve both agency (brokerage) and principle (dealer) functions.
  - Brokerage is typically remunerated with commissions.
  - Dealers profit from the bid-ask spread. So, dealers incur the risk of price changes on the stock since they must maintain an inventory and bear inventory financing costs.
  - If the majority of investors wish to sell the stock, the market maker is charged with buying in order to provide market liquidity.

2.3 Trading

- Position trading: Holding a position for weeks or months.
- Pure arbitrage: Arbitrage is taking advantage of a mispricing between two markets by simultaneously buying and selling the same commodity.
- Risk arbitrage: Taking advantage of a real or perceived mispricing based on some information the trader possesses without perfectly covering or eliminating all the risk.
- Program trading: a type of trading in securities, usually consisting of baskets of fifteen stocks or more that are executed by a computer program simultaneously based on predetermined conditions

2.4 Regulations

- Financial soundness: Net Capital Ratio (NCR)

$$NCR = \frac{\text{net operating capital} - \text{gross risks}}{\text{sum of equity capital required to maintain each business unit's license}}$$

  - net operating capital: net assets - aggregate of deductions + aggregate of additions
  - gross risks: aggregate of the amount of market, credit, and operational risks

- Conduct of business regulation: inspecting business conduct that may cause conflicts of interest between customers and financial institutions

3 Different Types of Investment Companies

3.1 Open-End Funds (Mutual Funds)

- Open-end funds, commonly referred to simply as **mutual funds**, are portfolios of securities, mainly stocks, bonds, and money market instruments.

- There are several important aspects of mutual funds.

  (1) Investors in mutual funds own a proportional share of the overall portfolio.

  (2) The investment manager of the mutual fund actively manages the portfolio, that is, buys some securities and sells others.

  (3) The value or price of the portfolio, called the **net asset value** (NAV), equals the market value of the portfolio minus the liabilities of the mutual fund divided by the number of shares owned by the mutual fund investors.

$$NAV = \frac{\text{Market value of portfolio} - \text{Liabilities}}{\text{Number of shares outstanding}}$$

  (4) The NAV or price of the fund is determined only once each day, at the close of the day. All new investments into the fund or withdrawals from the fund during a day are priced at the closing NAV.

- There are regulations for the funds whose primary purposes are to reduce investment company selling abuses and to ensure that investors receive sufficient and accurate information.

  - Investment companies must provide periodic financial reports and disclose their investment policies to investors.
  - They are required to have a certain degree of liquidity in order to be redeemable at any time, but they are limited to use leverage.
  - They are also regulated to protect customers against conflicts of interest.

3.2 Closed-End Funds

- The shares of a closed-end fund are very similar to the shares of common stock of a corporation.

- The price of the shares of a closed-end fund are determined by the supply and demand in the secondary market, so the price can fall below or rise above the net asset value per share.

- Consequently, there are two important differences between open-end funds and closed-end funds.

  (1) The number of shares of an open-end fund varies because the fund sponsor will sell new shares to investors and buy existing shares from shareholders.

  (2) By doing so, the share price is always equal to the NAV of the fund. In contrast, closed-end funds have a constant number of shares outstanding because the fund sponsor does not redeem shares and sell new shares to investors. Thus, the price of the fund shares may be above or below NAV.

- In addition, an important feature of closed-end funds is that the initial investors bear the substantial cost of underwriting the issuance of the funds' shares.

3.3 Unit Trusts

- A unit trust is similar to a closed-end fund in that the number of unit certificates is fixed, specializing in bonds.

- However, unit trusts differ in several ways from both mutual funds and closed-end funds.

  (1) There is no active trading of the bonds in the portfolio of the unit trust, so the cost of operating the trust will be considerably less than those of the other funds.

  (2) Unit trusts have a fixed termination date, while mutual funds and closed-end funds do not.

  (3) The unit trust investor knows that the portfolio consists of a specific portfolio of bonds and has no concern that the trustee will alter the portfolio.

3.4 Hedge Fund

- Hedge funds are similar to mutual funds in that they are pooled investment vehicles that accept investors' money and generally invest it on a collective basis.

- However, hedge funds are not subject to the numerous regulations that apply to mutual funds for the protection of individuals. So, they do not have to disclose their activities to third party.

- Hedge funds can be categorized by risk classification.

  - *More risky* funds: Market directional - These funds seek high returns using leverage, typically investing based on anticipated event.

- *Moderate risk* funds: Market neutral or value orientation - These funds have moderate exposure to market risk, typically favoring a longer-term investment strategy.
- *Risk-avoidance* funds: Market neutral - These funds strive for moderate, consistent returns with low risk.