

# 公司金融基础

## BASICS OF CORPORATE FINANCE

孙冬 编著



对外经济贸易大学出版社

University of International Business and Economics Press

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中国·北京

**图书在版编目 (CIP) 数据**

公司金融基础: 英文 / 孙冬编著. —北京: 对外  
经济贸易大学出版社, 2015

ISBN 978-7-5663-1435-2

I. ①公… II. ①孙… III. ①公司-金融-教材-英  
文 IV. ①F276.6

中国版本图书馆 CIP 数据核字 (2015) 第 193209 号

© 2015 年 对外经济贸易大学出版社出版发行

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**Basics of Corporate Finance**

**公司金融基础**

孙 冬 编著

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对外经济贸易大学出版社

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网址: <http://www.uibep.com> E-mail: uibep@126.com

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三河市少明印务有限公司印装 新华书店北京发行所发行

成品尺寸: 185mm×260mm 14 印张 323 千字

2015 年 9 月北京第 1 版 2015 年 9 月第 1 次印刷

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ISBN 978-7-5663-1435-2

印数: 0 001-1 500 册 定价: 35.00 元

# 前 言

公司金融学是金融专业的核心课程之一，目前大多数本科双语教学都使用国际著名学者罗斯编写的 *Corporation Finance* 作为专业教材。该教材体系完善、深入浅出，附有大量习题，堪称是该领域的最佳教材。但在教学过程中，笔者发现以下问题：一是阅读和理解上的障碍。英文教材基于英文思维编写，其逻辑编排与汉语教材有显著不同，且信息量极大，学生第一次接触公司金融理论和概念，大部分人在阅读时会感觉不适应，以致无法抓住概念和理论重点，无法深入、全面地掌握课程内容。二是体系框架上的衔接问题。我国金融专业的培养方案和专业课程有系统安排，而现行教材与课程教学大纲之间存在一定程度的不匹配，特别是现有教材内容几乎包含了公司金融学的所有问题，其中一些内容与其它课程有重复。三是背景和文化差异。教材中的案例均来自美国或其它发达市场经济国家，由于制度、法律和文化因素不同，可能导致学生理解偏差。为此，笔者编写了《公司金融基础》这本教材。

《公司金融基础》以价值及价值创造为核心，并以这一核心形成逻辑顺序，系统地阐述了公司金融学的理论和方法，包括与公司金融决策相关的基础财务知识、投资决策和方法、融资方式和融资决策、公司价值评估方法等基本内容。本书主要有以下特色：

(1) 内容集中、重点突出。本教材集中于公司金融学研究的主要领域和基本议题，如公司金融战略和价值估值、资本预算、融资方式、资本结构、股利政策以及公司金融学的基本研究方法，为学生提供了公司金融学研究的基本线路和框架图。

(2) 体系完善、注重衔接。本教材与其他金融学课程相辅相成，形成完整的金融学知识体系。资本预算部分与项目融资课程相互补充，融资方式与金融工具定价相互补充，资本结构与风险管理课程内容有一定相关，股利分配与投资银行学互为补充。这样有利于学生对金融学的学习形成一个全局观念，同时也避免了各门课程之间内容的重复。

(3) 语言简洁、表述平实。本教材介绍和总结了国际和国内公司金融学实证研究中得出的主要结论、发现的一些规律和现象，并且用简要、直观且学生比较容易理解的语言和方法阐述了用于理解这些规律和现象的最主要的理论模型和理论知识。

书稿的完成历时三年，期间得到了学术前辈、同事、学生的诸多帮助，使本书内容不断更新和完善。书籍的最终出版得益于华北电力大学与北京市共建的“教学名师培育计划”项目的支持，以及对外经济贸易大学出版社和责编汪洋的细心编辑、校对，在此一并感谢！书中尚有诸多不尽完善之处，例如，没有加入更多中国本土背景的案例，没能探索出一套更好的双语教材模式。书中的不足、甚至错误之处，恳请诸位同仁和读者批评指正。希望今后能在公司金融领域协同合作，共同努力，做出更多更好的成果。

编 者

2015年8月

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# CHAPTER 1

## Introduction

### Learning Objectives

- [1] Understand the important features of the four main types of firms and see why the advantages of the corporation forms have led it to dominate economic activity.
- [2] Explain the three main types of decisions a financial manager makes.
- [3] Know how a corporation is managed and controlled, the financial manager's place in it, and some of the ethical issues financial managers face.
- [4] Understand the importance of financial markets.

The focus of this course is how to make optimal corporate financial decisions. "If you don't know where you are going, it does not matter how you get there." So I will show you a big picture about corporation finance, that is:

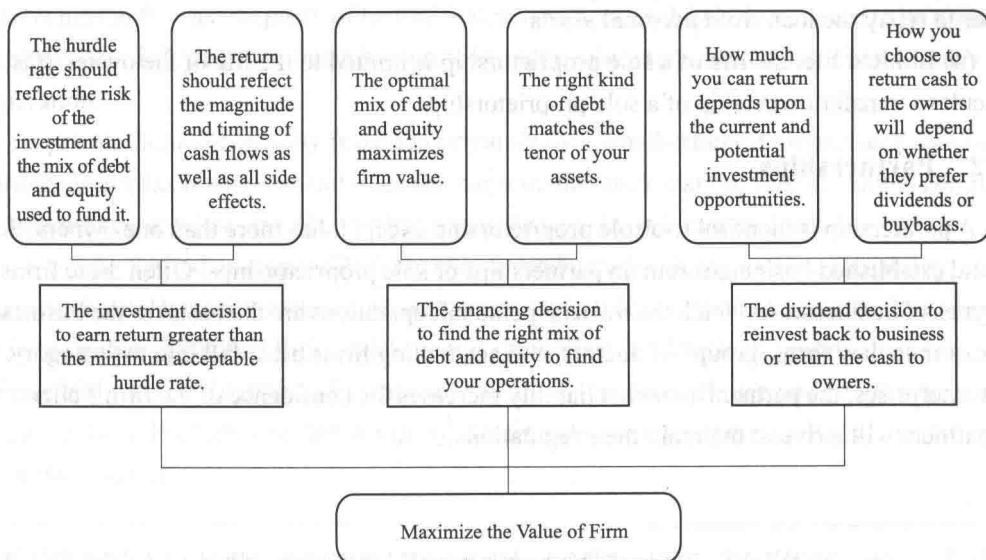


Figure 1-1 The Context of Corporation Finance



## 1.1 The Form of Business Organization

You may have been introduced to the forms of business organization in some prerequisite courses. Here you may wish to focus the discussion on issues concerning liability and control for the four forms of business organization: sole proprietorships, partnerships, limited liability companies and corporations.

### 1.1.1 Sole Proprietorships

A sole proprietorship<sup>①</sup> is a business owned and run by one person. Sole proprietorships are usually very small with few, if any, employees. Although they do not account for much sales revenue in the economy, they are the most common type of firms in the world. In China, this type of organization is up to 64.3 percentage of business<sup>②</sup>. Sole proprietorships have the following key characteristics:

(1) Owned by one person: there is no separation between the firm and the owner—the firm can have only one owner.

(2) Inexpensive to form: sole proprietorships are straightforward to set up, so many new businesses use this organizational form.

(3) Unlimited liability for business debts: the owner has unlimited personal liability for any of the firm's debts. That is, if the firm defaults on any debt payment, the lender can require the owner to repay the loan from personal assets.

(4) Limited life: the life of a sole proprietorship is limited to the life of the owner. It is also difficult to transfer ownership of a sole proprietorship.

### 1.1.2 Partnerships

A partnership is identical to a sole proprietorship except it has more than one owners. Some old and established businesses remain partnerships or sole proprietorships. Often these firms are the types of businesses in which the owners' personal reputations are the basis for the businesses. For example, law firms, groups of doctors, and accounting firms often fall into the category. For such enterprises, the partners' personal liability increases the confidence of the firm's clients that the partners will strive to maintain their reputations.

---

① 单一业主制，也叫独资企业。国际上，独资企业一般指单个自然人拥有的企业，即我国《个人独资企业法》给出的定义：“由一个自然人投资，财产为投资人个人所有，以其个人财产对企业债务负担无限责任的经营实体。”我国还有国有独资企业，这种类型的企业实际上是一种公司制企业，我国《公司法》第65条规定：“国有独资公司，是指国家单独出资、由国务院或地方人民政府授权本级人民政府国有资产监督管理机构履行出资人职责的有限责任公司。”

② 《第二次全国经济普查主要数据公报》。

Often there are two types of partnerships. In a general partnership<sup>①</sup>, all partners have unlimited liability. In a limited partnership<sup>②</sup>, at least one partner is a general partner with unlimited liability. Limited partners generally do not participate in management. Private equity funds and venture capital funds are two examples of industries dominated by limited partnerships. The following are key features of a partnership:

- (1) General partners have unlimited liability: all partners are liable for the firm's debt.
- (2) Limited life: the partnership ends on the death or withdrawal of any single partner.
- (3) Management control resides with general partners.
- (4) Difficult to transfer ownership: being partners with someone is not unlike being married to them—with the exception that if you want a divorce you have the additional burden of finding a suitable replacement spouse for your former partner.
- (5) Difficult to raise large amounts of capital.

### 1.1.3 Limited Liability Companies

A limited liability company<sup>③</sup> means that the owners' liability is limited to their investment, therefore, they cannot be held personally liable for the firm's debt. There are two types of limited liability companies: private and public companies. The owners of private limited companies are not allowed to trade their shares on an organized exchange. Public limited companies may allow their shares to be traded on an organized exchange.

A limited liability company (LLC) is a flexible form of enterprise that blends elements of partnership and corporate structures. It is a legal form of company that provides limited liability to its owners in the vast majority of United States jurisdictions. LLCs do not need to be organized for profit. An LLC, despite a business entity, is a type of unincorporated association and is not a corporation.

A private limited company is owned privately by a small group of people such as a family. A private limited company can not trade its shares on the stock market. Private limited companies can operate through just one director but it must have at least 2 shareholders.

A public limited company (PLC) is able to trade on the stock market. The ability to offer shares on the stock market makes it easier to raise capital; however, the accounts of the company are in the public domain. All financial records, including the director's reports must be audited and available to the Registrar of Companies at the Companies House and to all who want to scrutinise them. Furthermore, the company is vulnerable to take-overs as rivals have the option to purchase shares.

---

① 普通合伙人。

② 有限合伙人。

③ 有限责任公司和下文的股份有限公司都属于公司制企业。有限责任公司的股份不必划分成相等份额，我国公司法规定股东人数不得超过 50 人以上，不得少于 2 人。股份有限公司可以成为上市公司。由于我国国有制的特殊情况，国有独资公司也是一种有限责任公司，但不设股东会，只有董事会，代行部分股东会职能。

Table 1-1 The Common Ground and Difference between LLC and Corporation

	有限责任公司		股份有限公司
共同点	以股东投资额为限承担责任		
	以公司的全部资产承担责任		
	股东的财产与公司的财产是分离的		
不同点	股东人数	股东人数在 2~50 人*，不可以向社会公开募集资金	发起人一般不少于 5 人*，可以向社会公开募集资金
	股权证明	出资证明书，不能转让、流通	股票，可以转让、流通
	股权转让	受到的限制较多	比较自由
	股东大会和董事会	股东会的权限较大，董事经常是由股东自己兼任	股东会的权限有所限制，董事会的权限较大
	财务公开	财务会计报表按照规定期限送交各股东即可不必经过注册会计师的审计，也可以不公告	必须经过注册会计师的审计并出具报告，还要存档以便股东查阅，以募集设立方式成立的股份有限公司，其财务会计报告必须进行公告

\* 我国《公司法》的规定。

1.1.4 Corporations

The distinguishing feature of a corporation is a legal entity and artificial being, separating from its owners. As such, it has much of the legal power that people have. It can enter into contracts, acquire assets, incur obligations, and as we have already established, it enjoys protection under most jurisdictions against the seizure of its property. A corporation has some features:

- (1) Separate legal entity. It has a name and enjoys much of the legal power of nature persons. For example, corporations can acquire and exchange property. Corporations can enter into contracts and may sue and be sued as if they are citizens of their states of incorporation.
- (2) Limited owner liability—advantage. The shareholder’s liability is limited to the amount invested in the ownership shares.
- (3) Ownership is easily transferred—advantage. Because ownership in a corporation is represented by shares of stock, ownership can be readily transferred to new owners.
- (4) Unlimited life (perpetual succession)—advantage. Because the corporation is separate from its owners, the death or withdrawal of an owner does not affect its legal existence.
- (5) Greater access to the financial markets. Limited liability, ease of ownership transfer, and perpetual succession are the major advantages of the corporation form of business organization.

These give the corporation an enhanced ability to raise cash.

(6) Taxed at the corporate rate—disadvantage. There is one great disadvantage to incorporation. The government taxes corporate income. This tax is in addition to the personal income tax that shareholders pay on dividend income they receive.

## 1.2 The Goal of the Corporate Finance

The goal of the corporate firm is the central theme that links all the topics of this course. Some typical goals might be: to maximize profit, to maximize sales (or growth), social responsibility, to be the best on some other measure (quality of product, whatever). Usually from a business perspective, maximizing profit should be the goal, if for no other reason than it is a necessary condition to achieve other goals.

### 1.2.1 The Characters and Objectives of a Corporation

From the set-of-contracts perspective, a corporation is defined as a legal framework of contracts. The three most important contracts are:

- (1) The debt's claim on the firm's assets and cash flow.
- (2) The equity's claim on the firm's residual assets and cash flow.

(3) The shareholders' contract with the management team to run the company on their behavior.

Each group has its own interest of a corporation through contracts, so they are owners of a corporation, in other words, stakeholders. These stakeholders have usually common interests of a corporation to success because it is necessary to realize their goals. But conflicts of interests, especially in times of financial distress, are present between shareholders, debtholders, management, and other stakeholders<sup>①</sup> in the firm (including employees, suppliers, customers, and creditors). Conflicts of interests can also arise within each of these groups. For example, some shareholders may believe that the firm should invest only in ecologically responsible projects while others care only about increasing their wealth. Conflicts between classes of debt such as subordinated<sup>②</sup> debt and unsubordinated debt are especially prevalent in times of financial distress.

Therefore, the corporate goals may be more than one and different with each stakeholder group, such as common objectives which include: (1) profit maximization, (2) market share, (3) employee welfare, and (4) social responsibility. These objectives are not mutually

---

① In general, a stakeholder is someone other than a stockholder or creditor who potentially has a claim on the cash flows of the firm.

② 次级的.

exclusive and if the primary goal (i.e. maximizing stockholder wealth) is defined correctly, all these objectives can be accomplished. In modern corporate finance theory, the objective in decision-making is to maximize the value of the firm. A narrower objective is to maximize stockholder wealth. When the stocks are traded and markets are viewed to be efficient, the objective is to maximize the stock price.

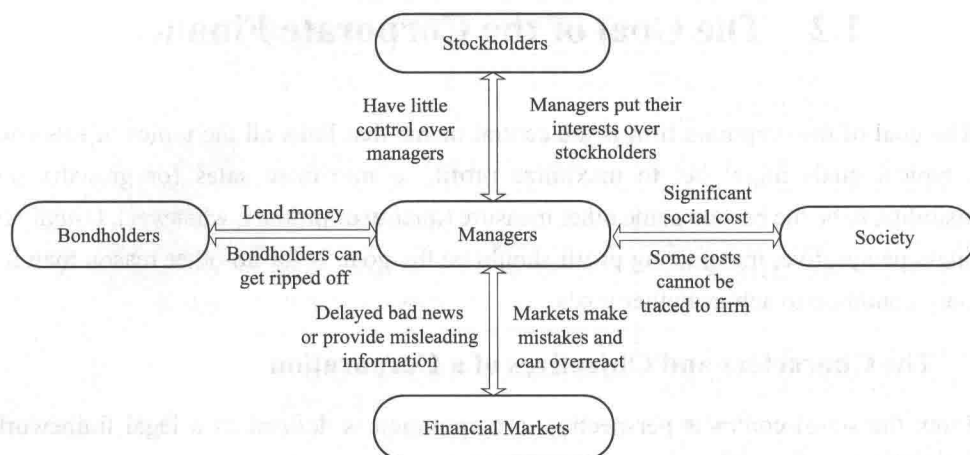


Figure 1-2 Stakeholders

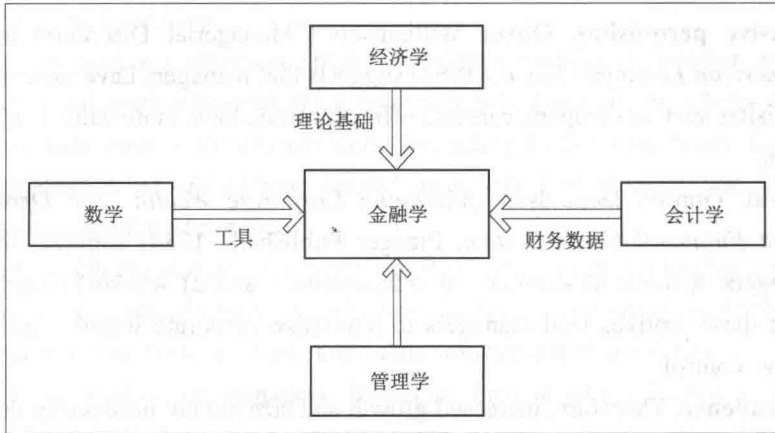
## 1.2.2 What Is Corporate Finance?

The purpose of the firm is to create value for owners. The firm must generate more cash flow than it uses. This is related to three major questions of corporate finance:

- (1) Capital budgeting: Should we take a particular project? What is the value of the project? That is, in what long-lived assets should the firm invest? When?
- (2) Capital structure: To undertake project investments, should you borrow from a bank or sell shares to partners? What are the advantages and costs of different ways of financing? This is a question concerns how the firm can raise cash or require capital expenditures. The answer to this involves the proportions of the firm's financing from current and long-term debt and equity.
- (3) Net working capital: How should short-term operating cash flow be managed? (or if you prefer, short-term financial planning). There is often a mismatch between the timing of cash inflows and cash outflows during operating activities. Furthermore, the amount and timing of operating cash flows are not known with certainty. From the balance sheet perspective, short-term management of cash flow is associated with a firm's net working capital. Net working capital is defined as current assets minus current liabilities. This question is the subject of short-term finance.

BOX 1-1

## The Relationship of Finance and other Economics and Management



### 1.2.3 The Principal-agency Problem

In a corporation, ownership and direct control are typically separate. Shareholders are elected by board of directors have ultimate decision-making authority. Chief executive officers (CEO) are typically board delegates and make decision day to day, as follows Figure 1-3.

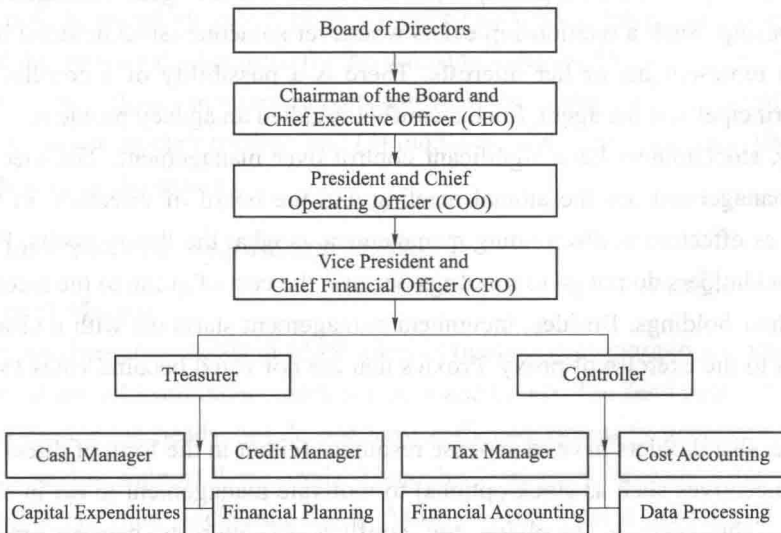


Figure 1-3 Hypothetical Organization Chart

Separation of ownership and control is a characteristic of most large corporations where management is responsible for the day-to-day operations of the firm while ownership can be spread over a huge number of stockholders. The manager's primary goal is to increase the value of the firm, but managerial goals sometimes may be different from shareholders' goals.

➤ **Expensive perquisites.** Oliver Williamson ("Managerial Discretion and Business Behavior", *American Economic Review* 1963) suggests that managers have expense preference because perquisites such as company cars and office furniture have more value to managers than to shareholders.

➤ **Survival.** Gordon Donaldson (*Managing Corporate Wealth: The Operations of a Comprehensive Financial Goals System*, Praeger Publishers, 1984) suggests three motives underlie managers' actions: a) survival, b) independence, and c) self-sufficiency. Donaldson concludes that these motives lead managers to maximize corporate wealth—the wealth over which they have control.

➤ **Independence.** Therefore, increased growth and size are not necessarily the same thing as increased shareholders' wealth.

Conflicts arise when the goals of management differ from the goals of shareholders. Of course, there are always exceptions to the rule. For example, GE is a classical case of a large conglomerate with diverse ownership. Microsoft is a large corporation (by market capitalization) but has a more focused corporate strategy and its largest shareholder, Bill Gates, still maintains significant control.

### Agency Relationship

The relationship between the principal (stockholders) and the agent (managers) is called an agency relationship. Such a relationship exists whenever someone (stockholders) hires another (managers) to represent his or her interests. There is a possibility of a conflict of interests between the principal and the agent. Such a conflict is called an agency problem.

In theory, stockholders have significant control over management. The mechanisms for disciplining management are the annual meeting and the board of directors. In fact, neither mechanism is as effective in disciplining management as what the theory posits. For example, most small stockholders do not go to meetings because the cost of going to the meeting exceeds the value of their holdings. Besides, incumbent management starts off with a clear advantage when it comes to the exercise of proxy. Proxies that are not voted become votes for incumbent management.

Therefore, shareholders have to expense resources (either in the form of direct monitoring, or providing incentives such as stock options) to motivate management to act in shareholders' best interests. The costs of resolving the conflicts of interests between managers and shareholders are called as agency costs. At the heart of agency problems is the separation of equity ownership from managerial control.



Do shareholders control managerial behavior? The following are the typical ways through which shareholders align their goals with those of management:

(1) The voting mechanism and control of the firm

The corporate charter often determines how difficult it is to replace the management team through the board of directors.

(2) Managerial incentives

➤ Incentives such as performance plans linked to accounting income (or, even better, cash flow) or equity participation through stock options help to bring the objectives of management more into line with those of the shareholders. According to *The Wall Street Journal*, in 2007, Lloyd L. Blankfein, CEO of Goldman Sachs, made \$600,000 in salary and \$67.9 million in bonuses tied to financial performance.

➤ Job prospects are also another incentive. Better performers within the firm will tend to get promoted. More generally, managers who are successful in pursuing stockholders' goals will be in greater demand in the labor market and thus command higher salaries.

- The labor market for managers: Managers have a strong incentive to work in the shareholders' interests if they can be easily replaced.

- Takeovers: Takeovers can be a shareholder's best friend if they (or the threat of their existence) force management to work in the shareholders' interests.

## 1.3 Financial Markets

The value of their investment is determined by the price of a corporation's shares or stocks. Organized markets on which shares trade are called as stock markets. These markets provide liquidity and determine a market price for the company's shares. Financial markets are structures through which funds flow. Financial markets can be distinguished along two major dimensions: (1) primary versus secondary markets and (2) money versus capital markets. The next sections discuss each of these dimensions.

### 1.3.1 Primary versus Secondary Markets

#### 1. Primary Markets

Primary markets are markets in which users of funds (e.g. corporations) raise funds through new issues of financial instruments, such as stocks and bonds. The fund users have new projects or expanded production needs, but do not have sufficient internally generated funds (such as retained earnings) to support these needs. Thus, the fund users issue securities in the external primary markets to raise additional funds. Most primary market transactions in China are arranged through financial institutions called investment banks—for example, China International Capital Corporation Limited (CICC)—who serve as intermediaries between the



issuing corporations and investors. By issuing primary market securities with the help of an investment bank, the fund users save the risk and cost of creating a market for its securities on their own.

Primary market financial instruments include issues of equity by firms initially going public. These first issues are usually referred to as initial public offerings (IPOs). For example, on May 18, 2012, Facebook company announced a \$115.2 billion IPO of its common stocks. The company's stock was underwritten by several investment banks, including Morgan Stanley and Credit.

Primary market securities include issues of additional equities or debt instruments. Debt and equity claims as contingent claims on the total firm value. The most important concept stems from the following characteristics of equity and debt claims:

(1) The promised payoff to debtholders is fixed, but depends on firm value in financial exigency<sup>①</sup>.

(2) Debtholders get paid before stockholders.

(3) Due to limited liability, stockholders are not required to “guarantee” that debtholders receive their full promised amount, by  $F$ .

Therefore, payoffs to stockholders are contingent upon the value of the firm, by  $X$ . If the value of the firm is less than the promised payoff to debtholders ( $X < F$ ), stockholders receive nothing.

## 2. Secondary Market

Once financial instruments such as stocks are issued in primary markets, they are then traded—that is, rebought and resold—in secondary markets. So, the secondary markets involve the sale of “used” securities from one investor to another. Buyers of secondary market securities are economic agents (consumers, businesses and governments) with excess funds. Sellers of secondary market financial instruments are economic agents in need of funds. Secondary markets provide a centralized marketplace where economic agents know they can transact quickly and efficiently. These markets therefore save economic agents the search and other costs of seeking buyers or sellers on their own. The New York Stock Exchange (NYSE), the American Stock Exchange (ASEX), and the National Association of Securities Dealers Automated Quotation (NASDAQ) systems are three well-know examples of secondary markets for trading stocks.

In addition to stocks and bonds, secondary markets also exist for financial instruments backed by mortgages and other assets, foreign exchanges, futures and options (i.e. derivative securities—financial securities whose payoffs are linked to other previously issued primary securities). Derivative securities have existed for centuries, but the growth in derivative securities markets occurred mainly in the 1970s, 1980s and 1990s.

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