

Lecture 1

Overview

Dr. Tao Yuan

Nanjing University Business School

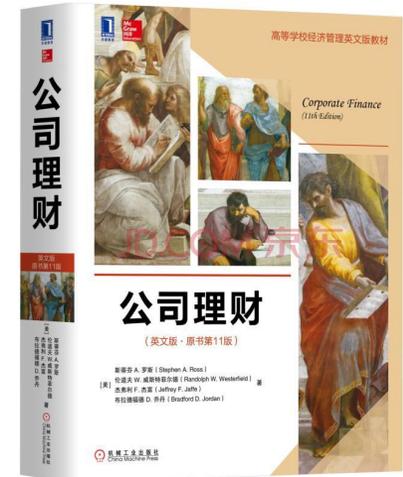
26 Aug 2025

Introduction to Instructor

- Instructor: Dr. Tao Yuan (袁涛)
Room 1613 Anzhong Building
Email: finyuan@nju.edu.cn
- Course materials will be placed on 教学立方.
- Teaching Assistant:
 - Mrs. Wei Sheng(盛伟), PhD student

Required Tools

- Textbook: Corporate Finance, 11th Edition, English Version, 公司理财英文11版, 机械工业出版社. <https://item.jd.com/12625332.html>
- Other materials:
 - Excel Spreadsheet
 - Online Financial Calculator(财务/金融 计算器)
- AI tools:
 - You can use them to assist you study, but I recommend not depending on them too much.

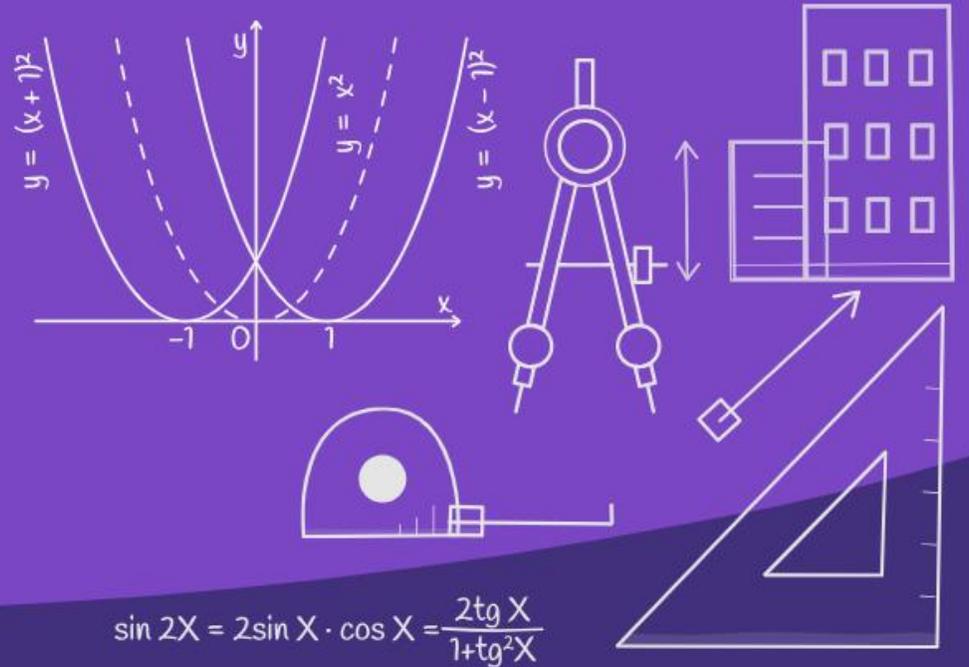


Financial Calculator

One source: <https://purecalculators.com/zh-CN/category/finance>

金融计算器

财务通常与金钱密切相关。我们提供许多财务计算器来帮助您处理日常财务。货币的历史表明，各种社会和经济制度至少有一个与货币相关的功能。货币可以是硬币和纸币等实物形式，也可以是电子形式。它可以用来购买具有内在价值的东西。货币的起源可以追溯到远古时代，但直到有记载的历史开始才被广泛使用。还有证据表明，在古代市场上进行了各种易货交易。其中包括对自身直接有用的各种牲畜和商品。其中一些还被换成了更有吸引力的物品，如珠子和贝壳。



About this course

- Pre-requisite: You should learn Introductory Accounting (基础会计) and be familiar with financial statement.
- This course lets you know basic steps to analyze a company. More natural science oriented than social science oriented.
- Able to value a financial asset, a project, or even a company and understand corporate financial policies from the view of CFO.
- Train your presentation skills and English.

Should I take this course?

- Yes. If you
 - Want to learn finance.
 - Plan to find a job in the financial industry, such as brokerage firm, commercial bank, and investment bank.
 - Want to work with me in 大学生创新创业训练, 银星杯论文大赛

- No. If you
 - Are lazy to learning new things and to challenge yourself.
 - Want to spend little time but get a high score.

How can we explain this?

- Case 1

2015-8-7 京东(NASDAQ:JD)宣布一项计划, 公司董事长兼CEO刘强东在规定的10年内, 每年基本工资为1元人民币, 且没有现金奖励. 刘强东要和奶茶妹妹去喝西北风吗?

- Case 2

2020-8-3 康希诺(688185)登陆科创板, 誉为“新冠疫苗第一股”的康希诺开盘后上涨124%, 报470元, 但随后涨幅收窄, 最终报收393.11元。康希诺生物 (06185.HK)的收盘价198.1港元, 相比A股393.11元的价格, 是打了个5折.

What is the relation between them?

Managers (职业经理人)

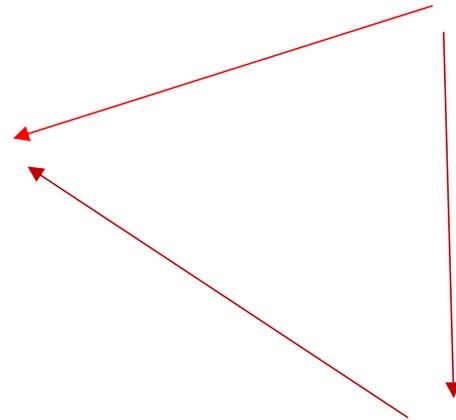
- 高管,
- 总经理, 总裁
- 财务总监, 人力资源总监等

Shareholders (股东)

- 大股东, 小股东
- 国资委
- 公募、私募、对冲、养老基金
- 个人投资者

Directors (董事)

- 董事长、董事会主席
- 独立董事
- 执行董事



Corporate Governance

文化和价值观 里程碑 领导团队 我们的业务



蔡崇信
主席



吴泳铭
董事兼首席执行官



J. MICHAEL EVANS
董事兼总裁



武卫
董事



徐宏
首席财务官



蒋芳
首席人才官



俞思瑛
首席法务官



蒋凡
阿里电商事业群首席执行官



万霖
菜鸟集团首席执行官



樊路远
大文娱集团首席执行官

主页 投资者新闻 投资者活动 业绩和财务报告 证券公告 年度股东大会 公司治理 投资者工具

公司治理 > 董事会

董事会成员

蔡崇信
主席

吴泳铭
董事兼首席执行官

J. Michael EVANS
董事兼总裁

武卫
董事

杨致远
独立董事

Wan Ling MARTELLO
独立董事

单伟建
独立董事

利蕴莲
独立董事

吴港平
独立董事

Kabir MISRA
独立董事

What is the role of CFO (Chief Financial Officer)

Financial Analyst



- Investors have limited time and professional skills to process information flow from firms.
- Analysts stand in the middle by digging and disseminating information and sell their reports to investors.
- Knowledge in corporate finance is a must as a financial analyst.

09:40 79%

正式发布！2025 第二十三届新财富最佳分析师评选结果揭晓！

新财富 2025年08月23日 07:59 广东 2人

☆ 星标

- 640家买方机构完成有效投票
- 真实记录、呈现投票人的意见
- 原始数据封存5年，研究机构可委托第三方二次审计

新财富
最佳分析师
NFRB

第二十三届新财富最佳分析师
评选结果

宏观经济

1 广发证券

新财富 30 931 21 写留言

Introduction to Financial Statement

- Financial Statement (财务报表) provides investors with information on the financial health of a company. (例子: 中国中车2020年财务年报)
- Financial statement mainly consists of three major sheets”
 - Balance sheet (资产负债表)
 - Income statement (损益表)
 - Cash flow statement (现金流量表)
- Accrual accounting (权责发生制): income is reported when it is earned, or accrued, even though no cash flow has necessarily occurred.

How to find a Financial Report?

- 上市公司主页—投资者关系
- 证监会、上交所、深交所信息披露部
- 数据供应商：WIND (万得金融终端), 同花顺, Bloomberg, Thompson Reuters
- 发布时间：每年3 4月份

Quick question: 如何快速找到上市公司“中国中车”的财务年报?

Balance Sheet

	2020	2019
Current assets:		
Cash and equivalents	\$140	\$107
Accounts receivable	294	270
Inventories	269	280
Other	<u>58</u>	<u>50</u>
Total current assets	<u>\$761</u>	<u>\$707</u>
Fixed assets:		
Property, plant, and equipment	\$1,423	\$1,274
Less accumulated depreciation	<u>(550)</u>	<u>(460)</u>
Net property, plant, and equipment	873	814
Intangible assets and other	<u>245</u>	<u>221</u>
Total fixed assets	<u>\$1,118</u>	<u>\$1,035</u>
Total assets	<u><u>\$1,879</u></u>	<u><u>\$1,742</u></u>

The assets are listed in order by the length of time it would normally take a firm with ongoing operations to convert them into cash.

Clearly, cash is much more liquid than property, plant, and equipment.

Balance Sheet



- BS reflects the financial position of a company at one point of time.
- Basic rules
 - $\text{Asset} = \text{Liability} + \text{Equity}$
 - $\text{Net working capital} = \text{Current asset} - \text{Current liability}$
 - $\text{Capital spending} = \text{Ending fixed assets} - \text{Beginning fixed assets} + \text{Depreciation}$

Income Statement



The operations section of the income statement reports the firm's revenues and expenses from principal operations.

Total operating revenues	\$2,262
Cost of goods sold	1,655
Selling, general, and administrative expenses	327
Depreciation	90
Operating income	<u>\$190</u>
Other income	29
Earnings before interest and taxes	<u>\$219</u>
Interest expense	49
Pretax income	<u>\$170</u>
Taxes	84
Current: \$71	
Deferred: \$13	
Net income	<u><u>\$86</u></u>
Addition to retained earnings	<u>\$43</u>
Dividends:	\$43

Income Statement

- Income statement measures revenue and expense over a specific period.
- Basic rules
 - Revenue – Expense = Income
 - EBIT = Sales – Cost – SG&A – Depreciation
 - Net income = EBIT – Interest – Tax = Retained earning + Dividend
- Non-cash item
 - Depreciation is the most apparent. No firm ever writes a check for “depreciation.”
 - Thus, net income is not cash.

Cash Flow Statement

- Cash flows are hard to manipulate. Three components of CFS:
 - Cash flow from operating activities (CFO)
 - Cash flow from investing activities (CFI)
 - Cash flow from financing activities (CFF)
- Basic rules
 - $CFO + CFF + CFI = \text{Change in cash balance}$
 - $CFI = \text{Purchase of fixed assets} + \text{Sale of fixed assets}$
 - $CFF = \text{Net borrowing} + \text{Net stock issuance} + \text{Dividend}$

The link between the three statements

- **Balance sheet and Income statement**

Net income = Retained earning + Dividend

- **Balance sheet and Cash flow statement**

Change in cash balance = CFO+CFI+CFF

- **Income statement and Cash flow statement**

CFO = Net income + adjust non-cash items + Adjust current assets and liabilities

Financial Ratios



I. Short-Term Solvency, or Liquidity, Ratios

$$\text{Current ratio} = \frac{\text{Current assets}}{\text{Current liabilities}}$$

$$\text{Quick ratio} = \frac{\text{Current assets} - \text{Inventory}}{\text{Current liabilities}}$$

$$\text{Cash ratio} = \frac{\text{Cash}}{\text{Current liabilities}}$$

II. Long-Term Solvency, or Financial Leverage, Ratios

$$\text{Total debt ratio} = \frac{\text{Total assets} - \text{Total equity}}{\text{Total assets}}$$

$$\text{Debt-equity ratio} = \text{Total debt} / \text{Total equity}$$

$$\text{Equity multiplier} = \text{Total assets} / \text{Total equity}$$

$$\text{Times interest earned ratio} = \frac{\text{EBIT}}{\text{Interest}}$$

$$\text{Cash coverage ratio} = \frac{\text{EBITDA}}{\text{Interest}}$$

III. Asset Utilization, or Turnover, Ratios

$$\text{Inventory turnover} = \frac{\text{Cost of goods sold}}{\text{Inventory}}$$

$$\text{Days' sales in inventory} = \frac{365 \text{ days}}{\text{Inventory turnover}}$$

$$\text{Receivables turnover} = \frac{\text{Sales}}{\text{Accounts receivable}}$$

$$\text{Days' sales in receivables} = \frac{365 \text{ days}}{\text{Receivables turnover}}$$

$$\text{Total asset turnover} = \frac{\text{Sales}}{\text{Total assets}}$$

$$\text{Capital intensity} = \frac{\text{Total assets}}{\text{Sales}}$$

IV. Profitability Ratios

$$\text{Profit margin} = \frac{\text{Net income}}{\text{Sales}}$$

$$\text{Return on assets (ROA)} = \frac{\text{Net income}}{\text{Total assets}}$$

$$\text{Return on equity (ROE)} = \frac{\text{Net income}}{\text{Total equity}}$$

$$\text{ROE} = \frac{\text{Net income}}{\text{Sales}} \times \frac{\text{Sales}}{\text{Assets}} \times \frac{\text{Assets}}{\text{Equity}}$$

V. Market Value Ratios

$$\text{Price-earnings ratio} = \frac{\text{Price per share}}{\text{Earnings per share}}$$

$$\text{Market-to-book ratio} = \frac{\text{Market value per share}}{\text{Book value per share}}$$

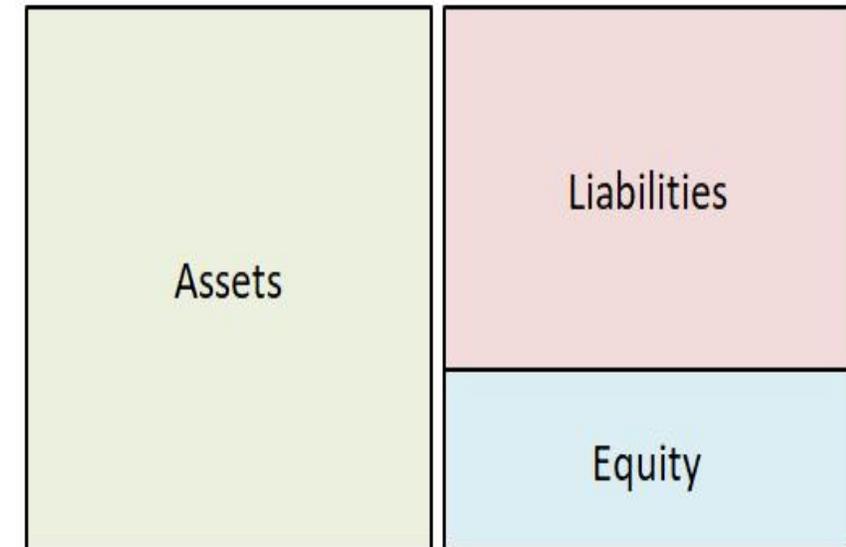
$$\text{EV multiple} = \frac{\text{Enterprise value}}{\text{EBITDA}}$$

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What is Financial Management?

- Financial manager and analyst must understand:
 - Valuation: What is an asset or a company worth?
 - Investment decision: How to spend money? What long-term investments should the firm choose?
 - Financing decision: How to raise money? How should the firm raise funds for the selected investments?
 - Impact of financial policies: How investment or financing decisions impact firm valuation?

Balance Sheet Assets, Liabilities and Equity



Finance vs. Accounting

● Accounting

- Historical performance, e.g., book value
- The accuracy and reliability of financial reports
- Backward looking and rule-based
- CPA, 会计资格考试

● Finance

- Determine value based on future forecast, e.g., market value
- Rely on the information provided from accounting statement
- Forward looking and need personal judgment and experience
- CFA, FRM, 证券从业资格证, 银行从业资格证

The goal of Financial Management

- Traditional view: maximize firm value or maximize shareholder's wealth. Not maximize profits.
- Nowadays: take environmental, social, and governance (ESG) aspects into consideration.

月薪15万! 给香港身份! 头部券商、四大纷纷出手, ESG岗位如此火爆?

ESG求职圈 投行圈子 2023-09-02 11:13 发表于北京



“今年2月初, 投中网一篇《ESG岗位都炒到15W月薪了?》火爆网络



ESG真的火了!

“企业ESG部门经理月薪10-15万, 应届生起薪2-4万, 已经算个正常薪资水平。” ESG猎头如是说。

在“裁员”“降薪”之类的话题不绝于耳之际,

券商等金融机构对ESG背景的人才需求却出现爆发式增长, 争相布局ESG岗位, 甚至不惜花费重金招

Investment Decisions



- **Investment Decision (投资决策)**

Purchase real assets which will generate cash flow in the future

- **Examples**

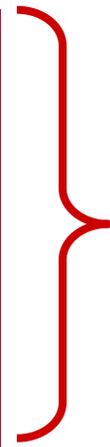
- Media acquires Kuka for €37.07 billion
- Tesla spends \$1.46 billion in research and development for new car model in 2018



Capital Budgeting

Current Assets

Fixed Assets
1 Tangible
2 Intangible



What long-term
investments
should the firm
choose?

Current
Liabilities

Long-Term
Debt

Shareholders'
Equity

Financing Decisions



- **Financing Decision (融资决策)**

- Sell financial assets and obtain cash flow immediately
- Equity financing and debt financing
- Less important than investment decision

- **Examples**

- Nongfu Spring decides to raise \$1.1 billion in Hong Kong IPO in August 2020
- Walmart buys back \$6.7 billion of its shares



Quick question: How can we distinguish investment and financing decisions?



Capital Structure Decision



Current Assets

Fixed Assets
1 Tangible
2 Intangible

How should the firm raise funds for the selected investments?

Current Liabilities

Long-Term Debt

Shareholders' Equity

Short-Term Asset Management

