Università Cattaneo

A86012 Management and Principles of Accounting (2019/2020)

Session 10

Financial Management

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SESSION OBJECTIVES & OVERVIEW

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Course Overview

PGS	1. What is business	15. Accounting: glossary, vocabulary, terms
	2. Types of business	16. Introduction to financial accounting
	3. Management	17. Accounting for business transactions
	4. Review session 1	18. Recording transactions, journal and ledger
	5. Marketing	19. Recording owner's contributions & financing
	6. Marketing strategy	20. Review session 1
	7. Review session 2	21. Recording long-lived assets and investments
	8. Operations	22. Recording purchases
	9. Finance	23. Recording sales and employee compensation
	10. Financial management	24. Review session 2
	11. Review session 3	25. Adjusting and closing entries
	12. Human resources	26. Adjusting and closing entries …continued
	13. Review session 4	27. Cases and exercises
	14. Exam	**28. Exam**

SG

PT

Session Objectives

At the end of this session students will understand the importance of working capital management, capital investment appraisal for investments in fixed assets, long-term financing options using external debt or owners equity and managing investor relations.

Overview of Session 10

- Financial management
  - Working capital management: Managing current assets and liabilities
  - Capital budgeting and investment appraisal: Managing fixed assets, assessing risk, pricing long-term money, IRR, NPV; Payback
  - Long-term financing: Financing options using long-term debt or owners' equity
  - Investor relations: Stock markets, communicating with investors, measures that matter, TRS

Session 10 Overview

	Mins
Session objectives and outline	5
Recap of key points from session 9 – Finance, the accounting process, financial accounting, management accounting, audit and control	15
Working Capital Management: Managing current assets and liabilities	30
Capital budgeting and investment appraisal: Managing fixed assets, assessing risk, pricing long-term money, IRR, NPV and Pay back	30
Long-term financing: Financing options using long-term debt or owners' equity	20
Investor relations: Stock markets, communicating with investors, measures that matter	20
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RECAP OF SESSION 9 – FINANCE

Recap Session9

The accounting process: the nature of accounting, accountants, the accounting equation

Financial accounting: Accounting standards, double entry bookkeeping, the accounting cycle, the financial statements

Management accounting: Budgeting and forecasting, budgetary control, cost accounting for decision taking, fixed and variable costs, break-even analysis, variance analysis.

Audit and control: Audit committees, supervisory boards, reporting on internal control (COSO), internal audit external audit

WORKING CAPITAL MANAGEMENT

Cash to Cash Cycle

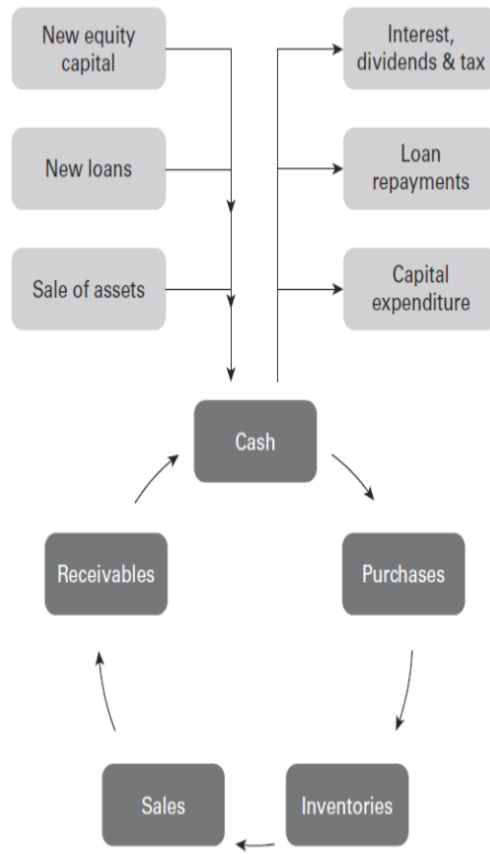
Buy raw materials	Pay wages And salaries	Other Manufacturing costs	Cost to store finished goods	Selling costs	Collect cash from customer
Day 1	Day 15	Day 30	Day 90	Day 120	Day 180

What is cash flow?

- **Operating cash flow**: cash flowing in and out of the business from normal day-to-day operations.
- **Investment cash flow**: the flow of cash relating to the purchase and sale of non-current assets.
- **Financing cash flow**: Cash inflows from new financing and cash outflows from repayment of financing and payment of interest and dividends.

Source: Accounting & Finance for Managers – Matt Bamber & Simon Perry

Cash flows in a typical business



Source: Accounting & Finance for Managers – Matt Bamber & Simon Perry

Managing Current Assets and Liabilities

Working Capital Management

- Since short-term assets and liabilities continually flow through organization, they are said to be "working"
- Terms *current* and *short-term* used interchangeably
- Current assets: cash, investments, accounts receivable and inventory
- Current liabilities: accounts payable, accrued salaries, accrued taxes, and short-term bank loans

Managing Current Assets and Liabilities

Managing Current Assets

- Managing cash
  - Idle cash does not make money
  - Managers try to keep just enough to pay bills
    - **Transaction balances**
      - Cash kept on hand by a firm to pay normal daily expenses, such as employee wages and bills for supplies and utilities
    - **Lockbox**
      - An address, usually a commercial bank, at which a company receives payments in order to speed collections from customers

Managing Current Assets and Liabilities

Managing Current Assets continued

- Investing idle cash
    - Sometimes cash comes in faster than needed to pay bills
    - **Marketable securities**
        - Investment in U.S. Treasury bills, certificates of deposit, commercial paper, or eurodollar deposits
    - **Treasury bills (T-bills)**
        - Short-term debt obligations
        - Considered risk-free

Table 16-1 Short-Term Investment Possibilities for Idle Cash

Type of Security	Maturity	Seller of Security	Safety level
U.S. Treasury bills	90 days	U.S. government	Excellent
U.S. Treasury bills	180 days	U.S. government	Excellent
Commercial paper	30 days	Major corporations	Very good
Certificates of deposit	90 days	U.S. commercial banks	Very good
Certificates of deposit	180 days	U.S. commercial banks	Very good
Eurodollars	90 days	European commercial banks	Very good

Source: M Business 6th Edition

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Source: M Business 6th Edition

Managing Current Assets and Liabilities

Managing Current Assets continued

- Investing idle cash continued
  - **Commercial certificates of deposit (CDs)**
    - Available in minimum amounts of $100,000
    - May be traded prior to maturity
  - **Commercial paper**
    - Written promise to pay specific amount
  - **Eurodollar market**
    - Market for trading U.S. dollars in foreign countries

Idle Cash

Individuals and companies can invest their idle cash in marketable securities such as U.S. Treasury bills, commercial paper, and eurodollar deposits.

Source: M Business 6th Edition

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Example cash-flow forecast

	Jan $	Feb $	Mar $	Apr $	May $	Jun $
Cash receipts						
Cash sales	2,500	3,000	3,250	3,500	3,000	3,500
Credit sales	0	2,500	3,000	3,250	3,500	3,000
Total receipts	2,500	5,500	6,250	6,750	6,500	6,500
Cash payments						
Inventory	4,000	6,000	4,000	4,000	3,500	4,000
Rent	1,200	1,200	1,200	1,200	1,200	1,200
Van	400	400	400	400	400	400
Total payments	5,600	7,600	5,600	5,600	5,100	5,600
Increase/(Decrease)	(3,100)	(2,100)	650	1,150	1,400	900
Opening balance	5,000	1,900	(200)	450	1,600	3,000
Closing balance	1,900	(200)	450	1,600	3,000	3,900

Source: Accounting & Finance for Managers – Matt Bamber & Simon Perry

Managing Current Assets and Liabilities

Managing Current Assets continued

- Managing accounts receivable
  - Important because many businesses make majority of sales on credit
  - Discounts for early payment come at cost of lowered profits
  - Credit ratings provided by credit bureaus, credit-rating agencies, and industry trade groups

Aged Debtors Report

Customer	Total	<30 days	30–60 days	60–90 days	>90 days
	$	$	$	$	$
Adam Co	15,981.81	15,981.81	–	–	–
Benson Co	27,613.59	–	–	18,279.03	9,334.56
Cantor Co	18,516.37	17,935.70		580.67	–

Source: Accounting & Finance for Managers – Matt Bamber & Simon Perry

Managing Current Assets and Liabilities

Managing Current Assets continued

- Optimizing inventory
  - Financial managers coordinate inventory purchases to manage cash flows
  - Optimal inventory levels determined mainly by method of production
  - Excess inventory ties up money unnecessarily, but inventory shortages could drive customers to competitor

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Inventory management

- The inventory turnover ratio
- Inventory reorder levels
- ABC inventory management
- The economic order quantity (EOQ) model
- Just-in-time inventory management

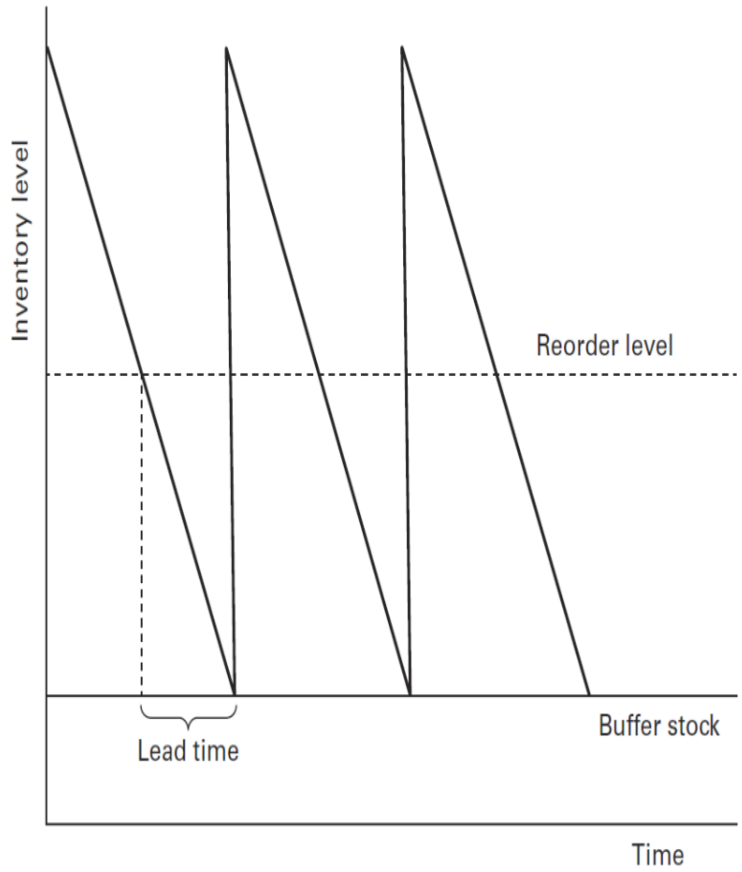
Source: Accounting & Finance for Managers – Matt Bamber & Simon Perry

The stock turnover ratio

$$\text{Inventory (days)} = \frac{\text{Average inventory}}{\text{Cost of sales}} \times 365$$

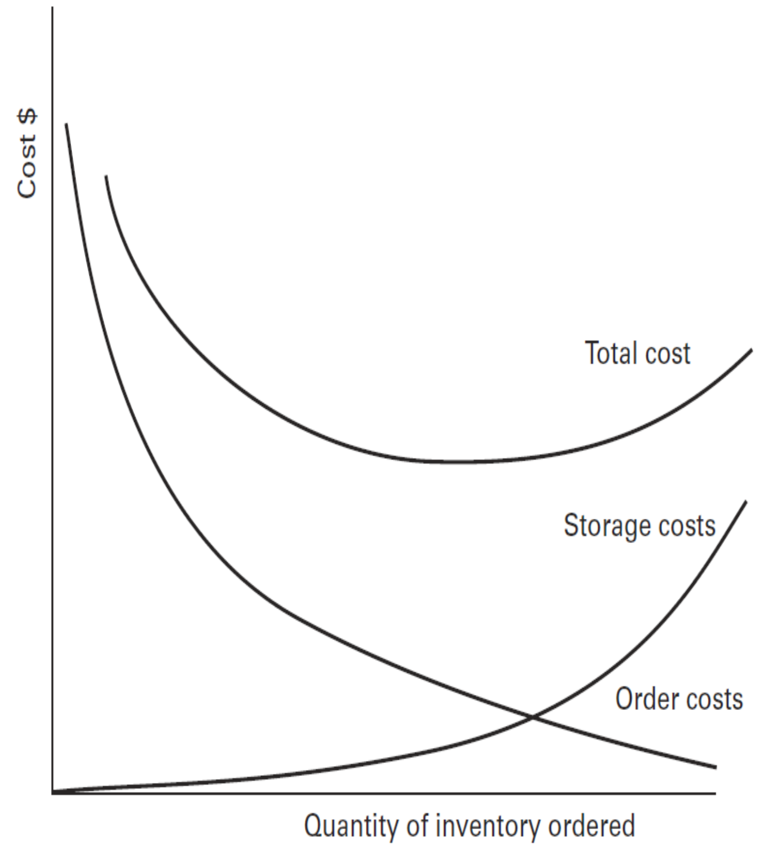
Source: Accounting & Finance for Managers – Matt Bamber & Simon Perry

Lead time and buffer stock



Source: Accounting & Finance for Managers – Matt Bamber & Simon Perry

Economic order quantity (EOQ) model



Source: Accounting & Finance for Managers – Matt Bamber & Simon Perry

EOQ calculation

$$EOQ = \sqrt{\frac{2C_O D}{C_H}}$$

Where:

C_H = the cost of holding 1 unit of stock for 1 year

C_O = the cost of ordering a consignment of stock

D = the annual demand

Source: Accounting & Finance for Managers – Matt Bamber & Simon Perry

ABC inventory analysis

Category	Inventory quantity (%)	Inventory value (%)
A	12	72
B	28	18
C	60	10
Total	**100**	**100**

Source: Accounting & Finance for Managers – Matt Bamber & Simon Perry

Managing Current Assets and Liabilities

Managing Current Liabilities

- Averting cash shortfall with short-term funds
- Accounts payable
  - **Trade credit**
    - Most suppliers offer discounts for early payment, offered as “1/10 net 30,” meaning 1 percent discount given if paid in 10 days, and full amount due in 30 days

Managing Current Assets and Liabilities

Managing Current Liabilities continued

- Bank loans
  - **Line of credit**
    - Bank agrees to lend specified amount of money upon request
  - **Secured loans**
    - Backed by collateral that bank can claim

Managing Current Assets and Liabilities

Managing Current Liabilities continued

- Bank loans continued
  - **Unsecured loans**
    - Backed only by borrowers’ reputation and credit rating
  - **Prime rate**
    - Interest rate that commercial banks charge best customers
  - Interest rates may be fixed or variable

Managing Current Assets and Liabilities

Managing Current Liabilities continued

- Nonbank liabilities
  - Virtually all financial institutions make short-term loans
  - Can sell accounts receivable to **factor**
  - Other nonbank liabilities: taxes owed to the government and wages owed to employees
    - Represent debt obligations and financial manager must plan to meet them as they come due

MANAGING FIXED ASSETS

Managing Fixed Assets

Long-Term (Fixed) Assets

- Expected to last many years
- Modern facilities and equipment are expensive, requiring long-term financing
- Capital lease is long-term contract and shows up on balance sheet as asset and liability
- Operating lease is short-term cancelable lease and does not show up on balance sheet

Source: M Business 6th Edition

Managing Fixed Assets

Capital Budgeting and Project Selection

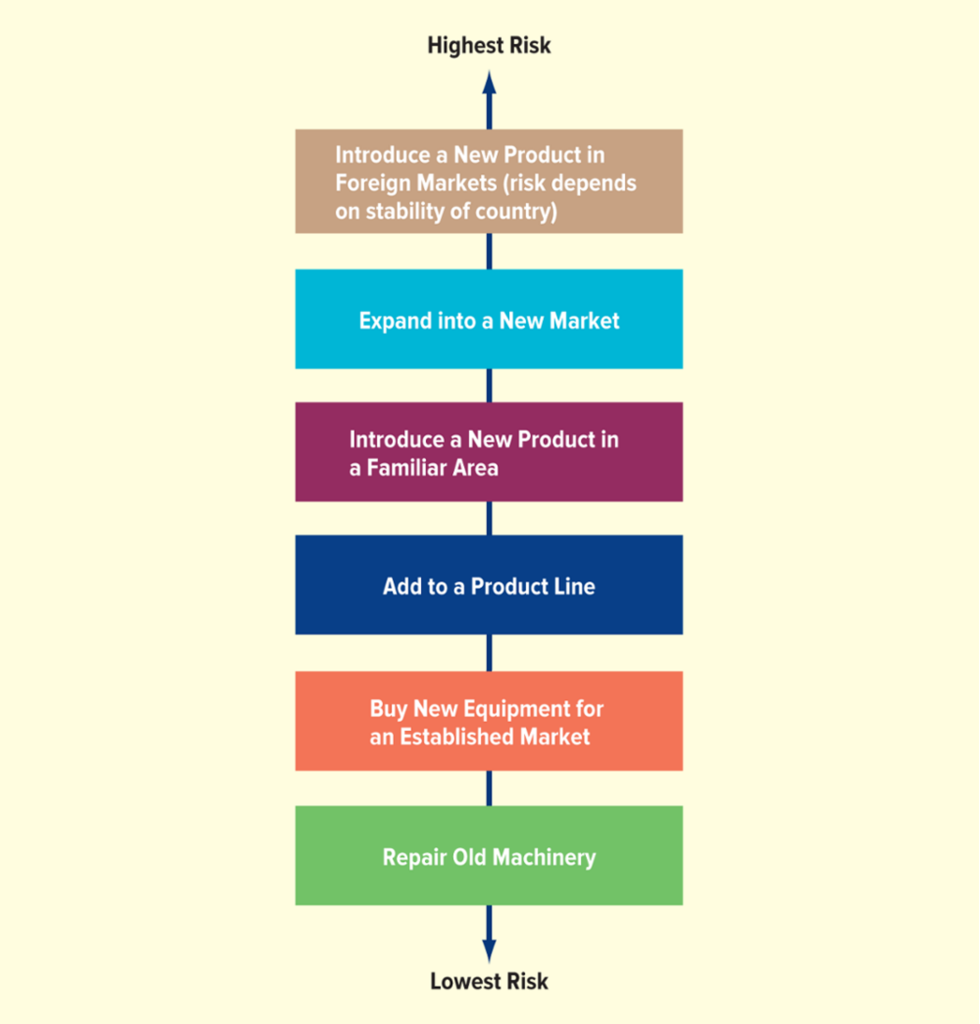
- **Capital budgeting**
  - Analyzing needs and selecting assets that will maximize value
  - All assets and projects must be continually reevaluated against company's needs
  - Budgeting is not exact process, and managers must be flexible

Managing Fixed Assets 3 of 4

Assessing Risk

- Every investment carries some risk
- Longer a project or asset is expected to last, greater its potential risk
  - May become obsolete or wear out prematurely
- Risk also affected by stability and competitive nature of marketplace and world economy

Figure 16-1 Qualitative Assessment of Capital Budgeting Risk



Source: M Business 6th Edition

Jump to long description in appendix

Risk in Pharmaceuticals

Pharmaceutical companies spend millions of dollars developing drugs such as Zyprexa without knowing if the drug will pass FDA approval and have a significant profit margin.

Source: M Business 6th Edition

Managing Fixed Assets

Pricing Long-Term Money

- Returns from any project must cover operating costs and cost of capital used to finance the project
- Most efficient and profitable companies attract lowest-cost funds
  - Typically offer reasonable returns for low relative risk
- New companies have strong motivator to use financial resources wisely
  - Will, over time, reduce costs of funds and increase profit

Capital Investment Appraisal

Project A

	Yr 0	Yr 1	Yr 2	Yr 3	Yr 4
Cash Outflows	(50,000)				
Cash Inflows		25,000	25,000	30,000	35,000

Project B

	Yr 0	Yr 1	Yr 2	Yr 3	Yr 4
Cash Outflows	(100,000)				
Cash Inflows		10,000	25,000	65,000	65,000

Project C

	Yr 0	Yr 1	Yr 2	Yr 3	Yr 4
Cash Outflows	(25,000)				
Cash Inflows		15,000	20,000	25,000	30,000

Capital Investment Appraisal

- Net Present Value (NPV)
- Internal Rate of Return (IRR)
- Pay back period

	Project A	Project B	Project C
Net cash flows	65,000	65,000	65,000
Pay back	2 years	3 years	18 months
IRR	41%	18%	68%
NPV @ 15%	€26,417	€6,523	€31,962

Traditional evaluation techniques

- Payback period (PP)
- Accounting rate of return (ARR)
- Discounted cash flow (DCF):
  - Net present value (NPV)
  - Internal rate of return (IRR)

Source: Accounting & Finance for Managers – Matt Bamber & Simon Perry

FINANCING

Financing with Long-Term Liabilities

Common Sources for Long-Term Funds

- Attracting new owners (equity financing)
- Long-term liabilities (debt financing)

Long-Term Liabilities

- Debts that will be repaid over number of years
- Take many different forms but in the end, key word is *debt*
- Heavily indebted companies may not make it through a recession and be forced into bankruptcy

Financing with Long-Term Liabilities

Bonds: Corporate IOUs

- Sold to raise long-term funds
- Bondholders receive regular interest payments and face value of bond on or before maturity date
- Bondholders enter into contract, or indenture, with bond issuer
- Annual interest rate (coupon rate) is percentage of face value company pays yearly

Financing with Long-Term Liabilities

Types of Bonds

- **Unsecured bonds**
  - Debentures not backed by specific collateral
- **Secured bonds**
  - Backed by specific collateral
- **Serial bonds**
  - Sequence of small bond issues

Financing with Long-Term Liabilities

Types of Bonds continued

- **Floating-rate bonds**
  - Interest rates change with current interest rates
- **Junk bonds**
  - High interest rate bond
  - Higher inherent risks

Financing with Owners' Equity

Owners' Equity

- Corporate owners own shares of company
- Stockholders' equity includes common stock, preferred stock, and retained earnings

Retained Earnings

- Reinvested in the assets of the firm
- Belong to owners in form of equity
- Only long-term funds company can generate internally

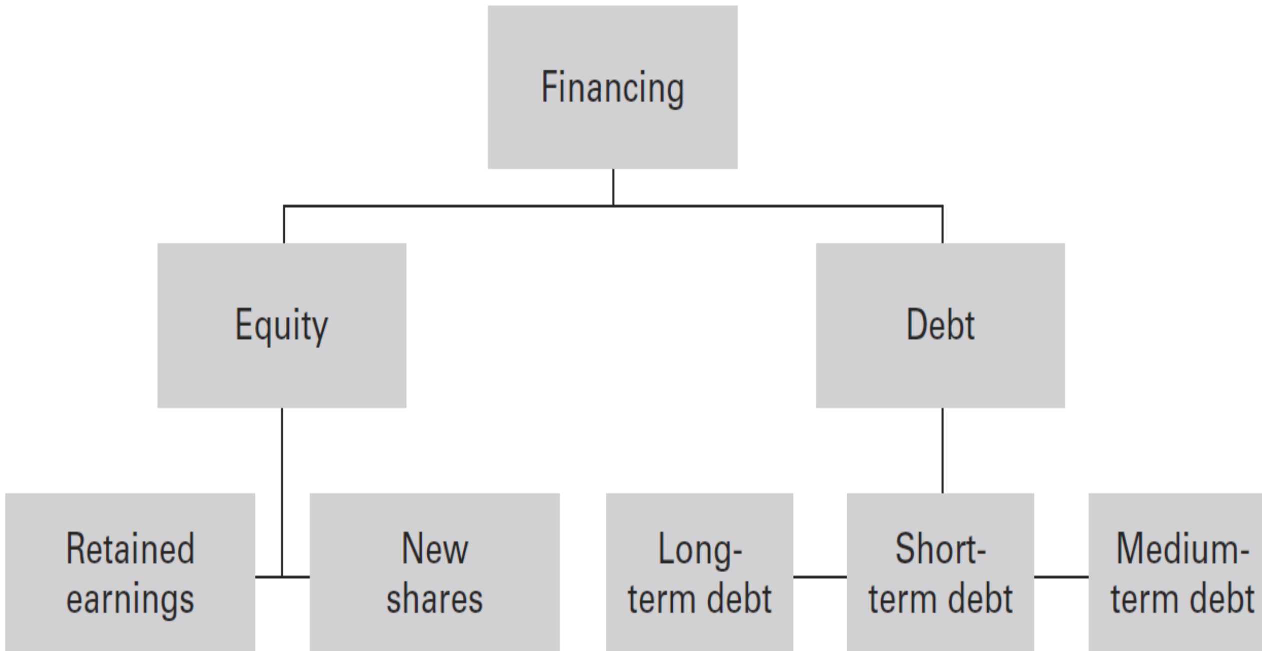
Source: M Business 6th Edition

Capital Markets: Sources of Financing

- Classify by term (duration):
  - Short/medium/long term
- Classify by type:
  - equity/ debt

Source: Accounting & Finance for Managers – Matt Bamber & Simon Perry

Capital Markets: Sources of Financing



Source: Accounting & Finance for Managers – Matt Bamber & Simon Perry

Issues to Consider

1. Cost (issue & servicing)
2. Duration (matching)
3. Gearing
4. Size of business

Source: Accounting & Finance for Managers – Matt Bamber & Simon Perry

Equity Financing: Types of Shares

1. Ordinary
2. Preference (Preferred)
3. Deferred
4. Convertible
5. Warrants

Source: Accounting & Finance for Managers – Matt Bamber & Simon Perry

Debt Financing and Leasing

- Loan Capital
  - Variants of loan capital
  - Security
  - Advantages of Debt over Equity

Source: Accounting & Finance for Managers – Matt Bamber & Simon Perry

Debt Financing and Leasing

- Leasing
  - Finance Leases
  - Operating Leases
  - Hire Purchase (HP)

Source: Accounting & Finance for Managers – Matt Bamber & Simon Perry

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Debt Financing and Leasing

The Capital Structure Decision:

- Matching assets with funds
- Replacement or growth?
- Cost and Flexibility
- Business Confidence and Expectations

Source: Accounting & Finance for Managers – Matt Bamber & Simon Perry

Capital Structures and Sources of Finance: The Cost of Capital and Risk

3 Elements To The Cost Of Capital:

- Risk-free Rate Of Return
- Premium For Business Risk
- Premium For Financial Risk

Source: Accounting & Finance for Managers – Matt Bamber & Simon Perry

The Cost of Equity: The Dividend Valuation Model

$$K_e = \frac{D_o}{P_o}$$

Where:

K_e = Cost of Equity

D_o = Current Dividend

P_o = Current ex-div share price

Weighted Average Cost of Capital

- Weighted Average Cost of Capital (WACC) attempts to calculate an overall cost of capital figure for a company taking into account
  - Cost of Equity Finance
  - Cost of Debt Finance
  - Relative Mix or Weightings of Equity and Debt

Source: Accounting & Finance for Managers – Matt Bamber & Simon Perry

Weighted Average Cost of Capital

- Calculation of WACC is straightforward once the costs of equity and debt finance have been established:

$$\frac{(MV_e \times K_e) + (MV_d \times K_d)}{MV_e + MV_d}$$

Source: Accounting & Finance for Managers – Matt Bamber & Simon Perry

Weighted Average Cost of Capital

- The market value of a company's debt is £1m and its cost is 6%, the market value of equity is £2m and its cost is 15%. Calculate the WACC.

$$\frac{(MV_e \times K_e) + (MV_d \times K_d)}{MV_e + MV_d}$$

$$\frac{(£1m \times 6\%) + (£2m \times 15\%)}{(£1m + £2m)} = 12\%$$

Source: Accounting & Finance for Managers – Matt Bamber & Simon Perry

Optimising (minimising) WACC

- Traditional view
- Modigliani and Miller Model
  - No tax (1958 model)
  - With tax (1963 model)

Source: Accounting & Finance for Managers – Matt Bamber & Simon Perry

Sources of Finance

STOCK MARKETS

Investment Banking

Primary market

- Market where firms raise financial capital

Secondary markets

- Stock exchanges and over-the-counter markets

Investment banking

- Sale of stocks and bonds for corporations

Source: M Business 6th Edition

The Securities Markets

Securities Markets

- Mechanism for buying and selling securities
- In broadest sense, stocks and bonds markets are providers of liquidity
- Without liquid securities markets, investors would not risk their savings on securities

The Securities Markets 2 of 5

Stock Markets

- Exist around world
- Two biggest U.S. stock markets are New York Stock Exchange (NYSE) and NASDAQ market
  - Both publicly traded organizations, no longer not-for-profit
  - Both bought or merged with electronic exchanges
  - NASDAQ was traditionally electronic market and NYSE was traditionally floor-traded market
- Electronic markets have grown quickly because of speed, low cost, and efficiency

The Securities Markets 3 of 5

The Over-the-Counter (OTC) Market

- Network of dealers
- Most corporate bonds and all U.S. securities traded over the counter
- OTC accounts for largest total dollar value of all secondary markets

The Securities Markets

Measuring Market Performance

- Investors and financial managers need to know how securities are performing compared with competitors'
- Performance measures—averages and indexes—very important to many different people
  - Index compares current stock prices with those in specified base period
  - Average is average of certain stock prices and some are weighted averages

Source: M Business 6th Edition

The Securities Markets 5 of 5

Measuring Market Performance continued

- Dow Jones Industrial Average gained 10 times from August 1982 to beginning of 2000
  - This was the Internet bubble, and they are difficult to see until they burst
- Before the housing bubble burst in October 2007, Dow Jones hit an all time high
- For investors to make sound financial decisions, it is important that they stay in touch with business news, markets, and indexes

Table 16-5 The 30 Stocks in the Dow Jones Industrial Average

3M Co	General Electric	Nike
American Express Co	Goldman Sachs	Pfizer
Apple	Home Depot	Proctor and Gamble
Boeing	Intel	Travelers Companies
Caterpillar	IBM	United Health Group
Chevron	Johnson and Johnson	United Technologies
Cisco Systems	JPMorgan Chase	Verizon
Coca-Cola	McDonald’s	Visa
DuPont	Merck	Walmart
ExxonMobil	Microsoft	Walt Disney

Source: M Business 6th Edition

INVESTOR RELATIONS

Investor relations

Investor Relations is the communication of information and insight between a company and the investment community.

This process enables a full appreciation of the company's business activities, strategy and prospects and allows the market to make an informed judgment about the fair value and appropriate ownership of a company.

IR - Functions

- Helps investors make informed buy and sell decisions
- Coordinates shareholders’ meetings
- Press conferences
- Analysts briefing
- Manages “Quiet Periods” i.e. prior to an IPO

MEASURES THAT MATTER

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Measures that Matter

1. Execution of corporate strategy
2. Management credibility
3. Quality of corporate strategy
4. Innovativeness
5. Ability to attract and retain talented people
6. Market share
7. Management experience
8. Alignment of compensation with shareholder interests
9. Research leadership
10. Quality of major business processes

Source: Ernst & Young LLP Measures that matter

REQUIRED READING AND RESEARCH ASSIGNMENT SESSION 11

Required Reading and research assignment

- Reading
  - M Business
    - Chapter 16 Financial Management and Securities Markets
- Exercises
  - M Business
    - Test Bank questions Chapter 16
- Research
  - Research assignment 9: Europe’s Top Companies-Key Financial Measures

SESSION SUMMARY AND VALIDATION, OVERVIEW SESSION 11

Session Summary

- Financial management
  - Working capital management: Managing current assets and liabilities
  - Capital budgeting and investment appraisal: Managing fixed assets, assessing risk, pricing long-term money, IRR, NPV; Payback
  - Long-term financing: Financing options using long-term debt or owners’ equity
  - Investor relations: Stock markets, communicating with investors, measures that matter

Overview of Session 11

- The Nature of Human Relations: motivation, theories of motivation, strategies for motivating
- Managing Human Resources: planning, recruiting, developing, compensating, unions, diversity, trends
- People Satisfaction and engagement

Session Validation

- What is working capital and what are its components?
- What are the objectives of working capital management?
- What are fixed assets?
- What do we mean by capital budgeting or investment appraisal?
- Define Payback, NPV, IRR
- What are the differences between equity financing and long-term debt financing?
- What is the difference between a Primary and Secondary securities market?