

Module 1

Introduction of Corporate Finance 企業財政/融資

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Learning Outcomes

Research, apply and critically evaluate/discuss

- 1) Financial assessment techniques used to
 - ✓ Report upon **a business's financial performance**
 - ✓ Identify potential **areas** for further investigation which may **improve its financial positions**
- 2) Various techniques used in the management and **control of financial resources**

研究、應用和審慎評估/討論

- 1) 財政評估技術用於
 - ✓ 報告一個企業的財務表現情況
 - ✓ 進一步調查潛在領域,可改善其財政地位
- 2) 用於管理和控制財務資源的各種技術

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Key Concepts and Skills

- Know the basic types of financial management decisions and the role of the Financial Manager
了解財務管理決策的基本類型及財務經理的角色
- Know the financial implications of the various forms of business organization
了解各種企業組織形式的財政影響
- Know the goal of financial management
知道財務管理的目標
- Understand the conflicts of interest that can arise between owners and managers
了解擁有者和經理之間可能出現的利益沖突
- Understand the various regulations that firms face
了解公司面臨的各項規例

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Module Outline

1. What is Corporate Finance 企業財政/融資?
2. The Corporate Firm 企業公司
3. The Goal of Financial Management 財務管理的目標
4. Agency Problem & Control of the Corporation
機構問題及公司控制
5. Regulations 規例

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1. What Is Corporate Finance ?

什麼是企業財政/融資

Corporate Finance addresses the following three questions:

- What **long-term investments** should the firm choose?
- How should **the firm raise funds** for the selected investments?
- How should **short-term assets** be managed and financed?
- 公司應選擇什麼長期投資呢？
- 公司應如何為選定的投資籌集資金？
- 應如何管理短期資產和融資呢？

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Balance Sheet Model of the Firm

(statement of financial position)

Total Value of Assets:

Current Assets
短期資產

Fixed Assets
固定資產
1 Tangible
有形資產
2 Intangible
無形資產

Total Firm Value to Investors:

Current Liabilities
短期債務

Long-Term Debt
長期債務

Shareholders' Equity
股東權益

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The Capital Budgeting Decision



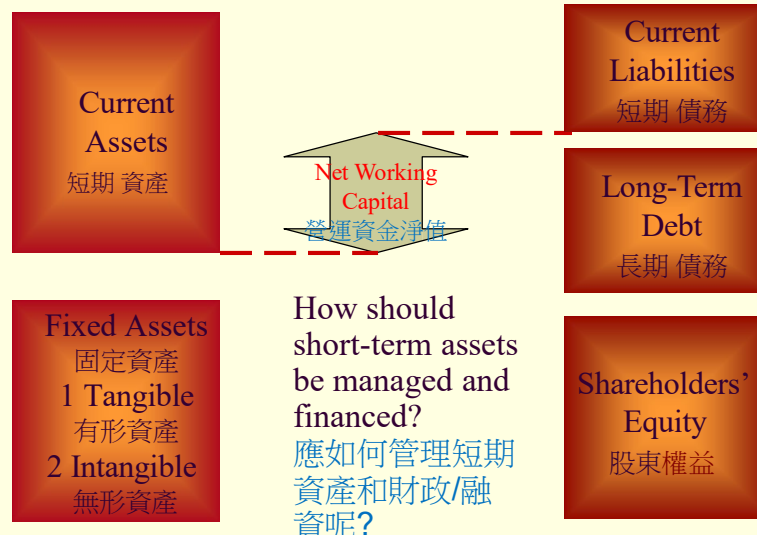
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The Capital Structure Decision



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Short-Term Asset Management



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The Financial Manager

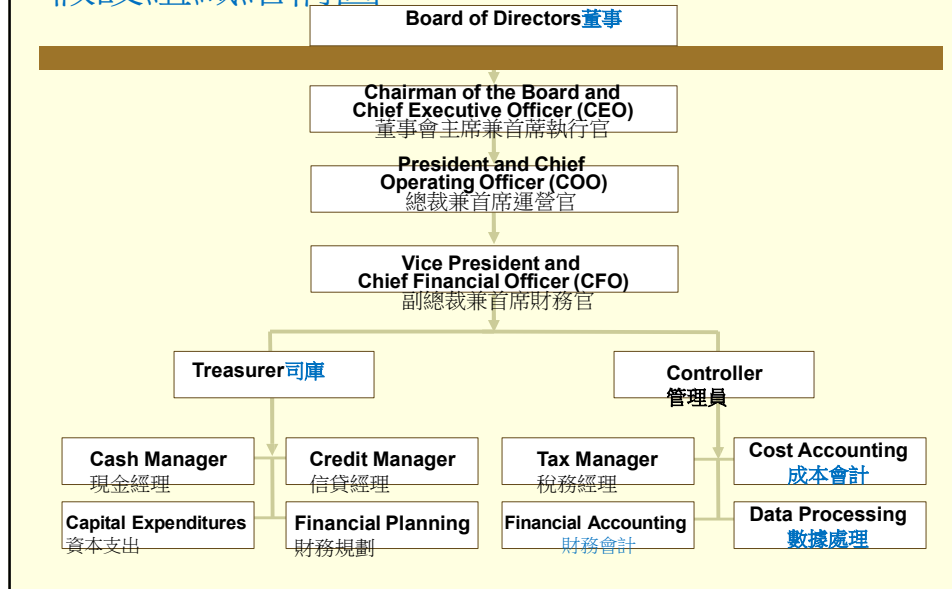
The Financial Manager's primary goal is to increase the value of the firm by:

1. Selecting **value-creating** projects
選擇創建價值的項目
2. Making **smart** financing decisions
作出明智經費的籌措決定

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Hypothetical Organization Chart

假設組織結構圖



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2 The Corporate Firm 企業公司

- The corporate form of business is the standard method for solving the problems encountered in raising large amounts of cash. 商業公司的形式是解決融資(提高大量現金)的標準方法。
- However, businesses can take other forms. 商業公司的組成形式是以標準方法來解決融資(提高大量現金)的問題。

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Forms of Business Organization

Sole Proprietorship
個人獨資企業



Partnership
伙伴關係



Corporation
公司

- General (Unlimited)無限
- Limited有限



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A Comparison 比較

	Corporation	Partnership
Liquidity 流動資金	Shares can be easily exchanged 股份可以很容易交換	Subject to substantial restrictions 大量限制
Voting Rights 投票權利	Usually each share gets one vote 每股有一票投票權利	General Partner is in charge; limited partners may have some voting rights 一般性合作伙伴有負責權; 有限公司合作伙伴可有一些投票權利
Taxation 課稅	Double 雙重	Partners pay taxes on distributions 合作伙伴繳稅是按合作比例
Reinvestment and dividend payout 再投資和分紅	Broad latitude 廣泛	All net cash flow is distributed to partners 所有淨現金流量分發給合作伙伴是按合作比例
Liability 責任	Limited liability 有限責任	General partners may have unlimited liability; limited partners enjoy limited liability 一般性合作伙伴會有無限的責任; 有限公司合作伙伴享有有限的責任
Continuity 連續性	Perpetual life永久生命	Limited life有限生命

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3 The Goal of Financial Management 財務管理的目標

- What is the correct goal 什麼是正確的目標呢？
 - Maximize profit 最大程度的利潤？
 - Minimize costs 盡量減少成本？
 - Maximize market share 擴大市場市場佔有率？
 - **Maximize shareholder wealth** 擴大股東財富？

1. What are other financial goals 其他財務目標？

2. What are other non-finance goals 非財務目標？

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4 The Agency Problem 代理人問題

- Agency relationship 代理人關係
 - Principal hires an agent to represent his/her interest 主要雇用代理人,代表他/她的利益
 - Stockholders (principals) hire managers (agents) to run the company 股東雇用經理 (代理人)有助於營運一間公司
- Agency problem 代理人問題
 - Conflict of interest between principal and agent 股東和代理人之間的利益沖突

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Managerial Goals 管理目標

- Managerial goals may be different from shareholder goals 管理目標可能與股東目標不同
 - Expensive bonus 昂貴額外獎賞
 - Survival 生存
 - Independence 獨立
- Increased growth and size are not necessarily equivalent to increased shareholder wealth
- 更多的增長和大小,是不一定相等於增加股東財富



Management vs Board of Director 董事
vs. Owners 僱主
vs. Shareholders 股東

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Managing Managers 管理經理

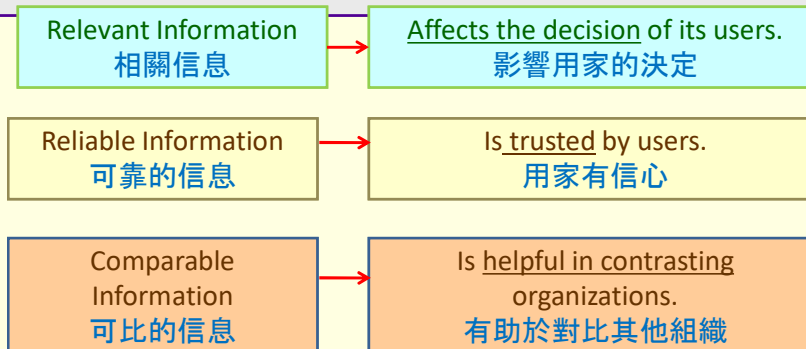
- Managerial compensation 管理補償
 - Incentives can be used to align management and stockholder interests 管理獎勵可以使用於股東利益
 - The incentives need to be structured carefully to make sure that they achieve their intended goal
 - 仔細設計獎勵的結構,肯定他們可實現其預期的目標
- Corporate control 公司控制
 - The risk of a takeover may result in better management 被收購的風險可能導致更好地管理
- Other stakeholders 其他利益有關者

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5. Regulations 規例

Generally Accepted Accounting Principles (GAAP)

Financial accounting practice is governed by concepts and rules known as generally accepted accounting principles (GAAP).
財務會計做法是由公認會計原則(GAAP)的概念和規則所規範的。



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Setting Accounting Principles

制定會計原則

Financial Accounting Standards Board is the **private group** that sets both **broad and specific principles**.
財務會計標準委員會是私人小組,制定廣泛和具體原則。



The Securities and Exchange Commission is the government group that establishes reporting requirements for companies that issue stock to the public.

證券交易委員會是規定公司報告和發行股票要求的政府機構

The International Accounting Standards Board (IASB) issues International Financial Reporting Standards that identify preferred accounting practices to create **harmony among accounting practices** of different countries.

國際會計準則理事會(國際會計準則)制定國際財務報告標準,確定優先會計做法,以促進不同國家之間會計做法的協調與統一

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International Standards 國際標準



The International Accounting Standards Board (IASB), an independent group (consisting of 16 individuals from many countries), issues International Financial Reporting Standards (IFRS) that identify preferred accounting practices.

國際會計準則理事會(國際會計準則理事會)、一個獨立的團體(包括16個人從許多國家)制定國際財務報告準則(IFRS),確定優先會計做法。



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Module 2

Financial Statements and Cash Flow
財務報表和現金流量

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Key Concepts and Skills

- Understand the information provided by financial statements 了解所提供的財務報表
- Differentiate between book and market values
區分帳面值和市場價值
- Know the difference between accounting income and cash flow 知道會計收入和現金流量之間的差異
- Calculate a firm's cash flow 計算一個公司的現金流量

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Chapter Outline

1. The Balance Sheet 資產負債表
 - ✓ Transaction - impacts to Assets, Liability and Equity, and profitability
 - ✓ Accounting / Operation – balance
 - ✓ Relationship between Income statement and Balance sheet
2. The Income Statement 損益表
3. Net Working Capital 營運資金淨值
4. Financial Cash Flow 財務現金流量
5. The Accounting Statement of Cash Flows
現金流量財務報表
6. Cash Flow Management 現金流量管理

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1 The Balance Sheet 資產負債表

- An accountant's snapshot of the firm's accounting value at a specific point in time
- The Balance Sheet Identity is:

Assets $\equiv$ Liabilities + Stockholder's Equity

資產 $\equiv$ 負債 + 股東權益

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1 The Balance Sheet (Content)

The Balance Sheet Identity is:

Assets $\equiv$ Liabilities + Stockholder's Equity

資產 $\equiv$ 負債 + 股東權益

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Balance Sheet Analysis

- When analyzing a balance sheet, the Finance Manager should be aware of three concerns:
 1. Liquidity 流動資金
 2. Debt versus equity 債務與股本
 3. Value versus cost 價值與成本

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Liquidity 流動資金

- Refers to the ease and quickness with which assets can be converted to cash—without a significant loss in value 提到的資產可很快轉換為現金而沒有一個重大損失的價值
- Current assets are the most liquid 短期資產是最流動
- Some non-current assets are intangible
- 一些非流動資產是無形的
- The more liquid a firm's assets, the less likely the firm is to experience problems meeting short-term obligations 公司有更多的短期資產,不可能會出現公司的短期債務問題
- Liquid assets frequently have lower rates of return than fixed assets 短期資產比固定資產往往有較低的回報率

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Debt versus Equity 債務與股本

- Creditors generally receive the first claim on the firm's cash flow 從公司的現金流量, 一般債權人是先獲得第一個索賠的.
- Shareholder's equity is the residual difference between assets and liabilities 股東權益的剩餘是從資產和負債之差.

$$\text{Assets} - \text{Liabilities} = \text{Stockholder's Equity}$$

$$\text{資產} - \text{負債} = \text{權益}$$

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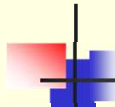
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Value versus Cost 價值與成本

- Under Generally Accepted Accounting Principles (GAAP), audited financial statements of firms carry assets at cost 根據公認會計原則(GAAP)公司的審計財務報表中, 資產是用成本價入帳
- Market value is the price at which the assets, liabilities, and equity could actually be bought or sold, which is a completely different concept from historical cost 市場價值是指資產、負債和權益實際能夠被買入或賣出的價格, 這與歷史成本是完全不同的概念。

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資產和負債



$$\text{Assets} \equiv \text{Liabilities} + \text{Stockholder's Equity}$$

$$\text{資產} \equiv \text{負債} + \text{權益}$$

資產:是企業擁有或控制的有價值的資源
 例: Cash現金、辦公樓、廠房、設備、待售的庫存商品、原材料

負債:是對別人的欠款
 例: Bank Loan銀行貸款、Bank Overdraft銀行透支款、欠供貨的貸款、欠政府的稅款

權益:擁有者的資產的股份
 例: Common Stock 普通股、Retained Earnings 留存收益

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2 The Income Statement

(Statement of Comprehensive Income)

- Measures financial performance over a specific period of time
- The accounting definition of income is:
- 會計界利潤的定義是:
- $\text{Revenue} - \text{Expenses} \equiv \text{Income}$
 收入 - 費用 $\equiv$ 利潤

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2. Income Statement Analysis

- There are three things to keep in mind when analyzing an income statement:
- 有三件事, 分析損益表時需牢記:
 1. Generally Accepted Accounting Principles (GAAP) 一般公認會計原則
 2. Non-Cash Items 非現金項目
 3. Time and Costs 時間和成本

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GAAP

- D The matching principle of GAAP dictates that **revenues** be matched with **expenses**
在配對原則的公認會計原則要求, 將收益相應的費用.
- D Thus, income is reported when it is **earned**, even though no cash flow may have occurred
因此, 收入是報告當它是賺取的, 即使沒有現金流量可能發生.

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Non-Cash Items (非現金項目)

- Depreciation is the most apparent. No firm ever writes a check for “depreciation”
折舊是最明顯的。沒有公司支票付出“貶值”
- Another non-cash item is **deferred taxes**, which does not represent a cash flow.
另一個非現金項目是遞延稅項，這並不代表一個現金流動。
- **Net income** is not cash
淨收入不是現金。

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Time and Costs (時間 和 成本)

- In the short-run, certain equipment, resources, and commitments of the firm are **fixed**, but the firm can vary such inputs as **labor and raw materials**.
在短期內，公司某些設備、資源同承諾是固定的，但公司可以改變勞動力和原材料等投入。
- In the long-run, all inputs of **production** (and hence costs) are **variable(可變)**. 從長遠來看，所有生產投入（以及成本）都係可變
- Financial accountants do not distinguish between **variable costs 可變成本** and **fixed costs**. Instead, accounting costs usually fit into a classification that distinguishes **product costs 產品成本** from **period costs 期間費用**.
- 財務會計師不區分可變成本可變成本和固定成本。相反，會計成本通常適合區分產品成本與期間成本的分類。

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1. **Product costs** 產品成本 determine cost of goods sold and help value inventory on hand. All costs that are not product costs are called **period costs** 產品成本決定所售商品的成本，並幫助評估手頭的庫存。所有非產品成本稱為期間成本

2. Selling and general administrative expenses 銷售和一般行政費用 identified with the accounting period in which they are incurred, and charged against sales revenue in the same period. Also called period expense

銷售和一般行政費用與發生它們的會計期間相標識，並於同一會計期間沖減銷售收入。也稱為期間成本。

3. Variable costs 可變成本

Change in total in direct proportion to a change in the level of activity. 總體變化與活動水平的變化成正比

4. Depreciation, 折舊, interest 利息, rent 租金, and other such costs associated with the passage of time (instead of with the units of output) and treated as fixed costs 固定成本.

折舊、折舊、利息利息、租金和其他與時間流逝相關的成本（而不是與產出單位相關），並被視為固定成本。

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3 Net Working Capital 淨營運資金

➤ Net Working Capital (NWC) =

Current Assets – Current Liabilities

淨營運資金 = 流動資產 - 流動負債

- NWC usually **grows with the firm**
- 淨營運資本通常隨著公司的成長，
- 因此，隨著公司的擴張，其 **NWC** 往往會成長，以支持其營運規模的擴大。這種成長確保公司能夠有效地管理其營運資金並維持其業務活動。

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4 Financial Cash Flow

- In finance, the **most important item** that can be extracted from financial statements is the **actual** cash flow of the firm.
- 在金融，**最重要**可從公司的財務報表提取的項目是**實際**現金流量。
- Since there is no magic in finance, it must be the case that the cash flow received from the firm's assets must equal the cash flows to the firm's creditors and stockholders.
- 因此公司從資產中獲得的現金流必須等於公司債權人和股東的現金流。

$$CF(A) \equiv CF(L) + CF(E)$$

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5 The Statement of Cash Flows

- There is an official accounting statement called the **statement of cash flows**.
- 有一個正式會計的財務報表是**現金流量財務報表**。
- 這三個組成部分的現金流動：
 - 現金流量從**經營活動** **Operating Activities**
 - 現金流量從**投資活動** **Investing Activities**
 - 現金流量從**融資活動** **Financing Activities**

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Purpose of the Statement of Cash Flows

How does a company obtain its cash?

公司如何獲得其現金呢?

Where does a company spend its cash? 公司的現金消費在哪裡呢?



What explains the change in the cash balance? 如何解釋現金的變化呢?

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Importance of Cash Flows

How did the business fund its operations?

是怎麼公司業務籌資為其營運?

Does the business have sufficient cash to pay its debts as they mature? 是否有足夠的業務現金以支付其債務呢?



Did the business make any dividend payments? 公司業務有沒有作出任何股息?

Did the business borrow any funds or repay any loans? 沒有任何的商業借貸資金或償還任何貸款呢?

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Format of the Statement
of Cash Flows

Company Name	
Statement of Cash Flows	
For Period Ended Date	
Cash flows from operating activities: 現金流量從經營活動	
[List of individual inflows and outflows]	
Net cash provided (used) by operating activities	\$ #####
Cash flows from investing activities: 現金流量從投資活動	
[List of individual inflows and outflows]	
Net cash provided (used) by investing activities	#####
Cash flows from financing activities: 現金流量從融資活動	
[List of individual inflows and outflows]	
Net cash provided (used) by financing activities	#####
Net increase (decrease) in cash	\$ #####
Cash (and equivalents) balance at beginning of period	#####
Cash (and equivalents) balance at end of period	\$ #####

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6 Cash Flow Management

- **Earnings** can be manipulated 操縱 using subjective decisions required under GAAP
- Total cash flow is more objective 更客觀, but the underlying components may also be “managed”
- Moving cash flow from the investing section to the operating section may make the firm's business appear more stable 更加穩定
- 可以使用GAAP要求嘅主觀決策嚟縱收益 總現金流量更客觀，但相關組成部分也可能被「管理」把現金流由投資部分轉移到運營部分可能會令公司業務更加穩定

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Importance of Cash Flow Statements

- Balance sheet, profit & loss account and cash flow statement
- Creative accounting and manipulation of profits
操縱
- Non-manipulation of cash

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現金流量的重要性

- 資產負債表, 損益表和現金流報表
- 創造性的會計和利潤操縱
- 非操縱現金

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RooHa Firm

A) Reducing balance depreciation at 40% p.a.

	£
Sales revenue	<u>640,000</u>
Depreciation (500,000x 40%)	200,000
All other expenses	<u>390,000</u>
Total expenses	<u>590,000</u>
Net profit	<u>50,000</u>

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(Continued)

B) Straight line depreciation over 5 years

	£
Sales revenue	<u>640,000</u>
Depreciation (500,000/5)	100,000
All other expenses	<u>390,000</u>
Total expenses	<u>490,000</u>
Net profit	<u>150,000</u>

NB: No physical change but profits tripled!!!

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分析現金來源和用途

Cash Flows of Competing Companies			
<i>all numbers in thousands</i>	BMX	ATV	Trex
Cash provided (used) by operating activities	\$ 90,000	\$ 40,000	\$ (24,000)
Cash provided (used) by investing activities:			
Proceeds from sale of operating assets 出售營運資產			26,000
Purchase of operating assets	(48,000)	(25,000)	
Cash provided (used) by financing activities:			
Proceeds from issuance of debt			13,000
Repayment of debt	(27,000)		
Net increase (decrease) in cash	<u>\$ 15,000</u>	<u>\$ 15,000</u>	<u>\$ 15,000</u>

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Thanks

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Module 2

An Introduction

- Managerial Accounting Concepts and Principles
管理會計概念和原則

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Managerial Accounting Basics



Financial accounting 財務會計
provides general
purpose **financial**
Information 財務信息
to those who are outside
外界 the organization.



Managerial accounting
管理會計 provides **financial**
and non-financial
information 財務和非財
務信息 for managers 管
理人員 of an organization
and other decision
makers



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3

Nature of Managerial Accounting

使用者和決策者	Financial Accounting	Managerial Accounting
1. Users and decision makers	Investors, creditors and other external 外部users	Managers, employees and other internal 內部users
2. Purpose of information	Making investment, credit and other decisions	Planning and control decisions
3. Flexibility of practice 實踐的彈性	Structured and often controlled by GAAP	Relatively flexible (no GAAP)
4. Timeliness of information	Often available only after audit is complete	Available quickly without need to wait for audit
5. Time dimension	Historical information with some predictions	Many projections and estimates未來預測
6. Focus of information	Emphasis on whole organization	Projects, processes and segments of an organization
7. Nature of information	Monetary information	Monetary and nonmonetary information

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Types of Business

3 main categories of business:

- Manufacturing 製造業
 - Trading 貿易
 - Service 服務
- How about pubs, restaurants, etc?

Costs can be described as:

- Manufacturing costs 制造成本
- Trading costs 貿易成本
- Service costs 服務成本

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Manufacturing company 製造業

Manufacturing companies purchase materials and components and convert them into finished goods.

製造業係購入材料及零件並將其轉換成製成品。

A manufacturing company must also develop, design, Market, and distribute its products.

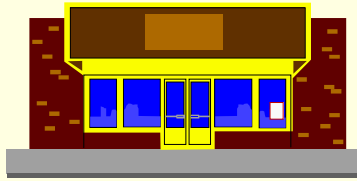
製造業必須同樣發展、設計、行銷，及配送其產品。

6

Merchandising/Trading company 買賣貿易業

Merchandising /Trading companies purchase and then sell tangible products without changing their basic form.

買賣業購入及銷售有形之產品，而未加以改變其基本型式。



7

Service-sector company 服務業

Service companies provide services or intangible products to their customers.

服務業係對其顧客提供服務或無形產品。

Labor is the most significant cost category.

勞工是最重要的成本

8

Types of Inventory 存貨的類型

Manufacturing-sector companies typically have one or more of the following three types of inventories:

傳統之製造業有下列三類存貨中之一種或多種:

1. Direct materials inventory

直接材料存貨

2. Work in process inventory (work in progress)

正在製品存貨

3. Finished goods inventory

製成品存貨

9

Types of Inventory 存貨的類型

Merchandising-sector /trading-sector companies hold only one type of inventory – the product in its original purchased form.

買賣業只有一種類型之存貨，即是產品原始之購入型式。

Service-sector companies do not hold inventories of tangible products.

服務業不持有有形的產品存貨。

5

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Classification of Manufacturing Costs 製造成本之分類

1.Direct materials costs 直接材料

2.Direct manufacturing labor costs 直接人工

3.Indirect manufacturing costs 間接製造成本
間接製造成本亦稱為製造費用(Manufacturing factory) °

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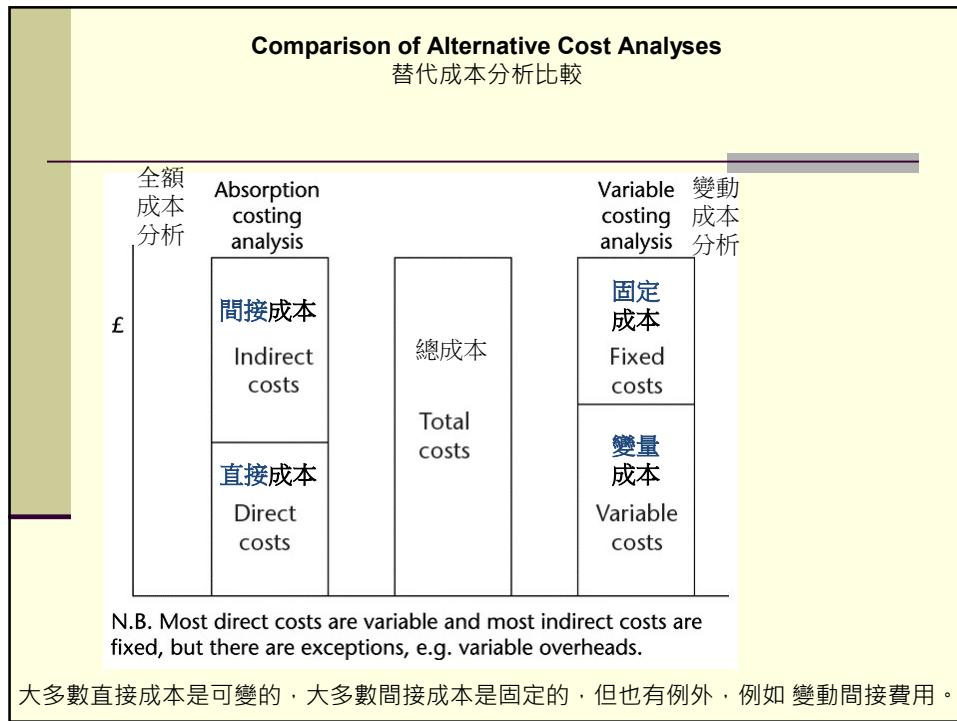
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Concept of Cost

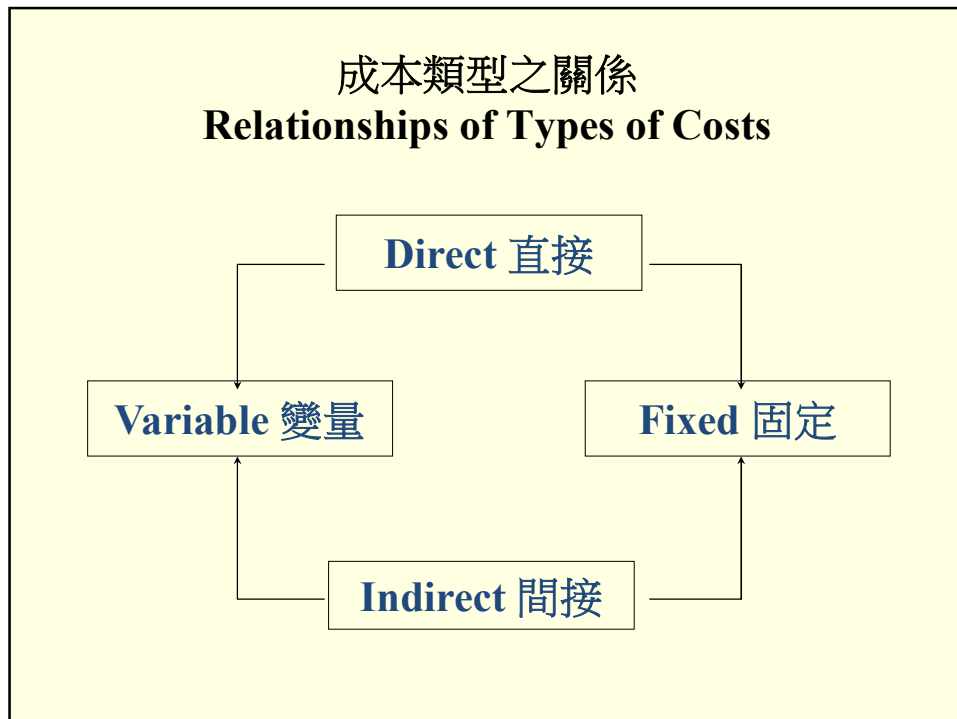
- Classification of cost分類成本
 - Closely related to product and process of production of goods and service
 - 緊密相關的產品和進程的生產的商品和服務
- Variable Cost變量成本, Fixed Cost固定成本, Combined cost (partly variable and some fixed cost)
- Eg. Product cost 產品成本– all direct cost related to production of goods and services
 - Direct materials 直接材料
 - Direct labour 直接人工
 - Production cost 生產成本
 - And other production related cost 其他生產有關的成本

1-6

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**Cost Behaviour:
Variable Costing Analysis –
Fixed and Variable Costs**

- **Variable costs vary in direct proportion with activity**
- 可變成本直接與活動成正比變化
(例如木家具、服裝面料)
(e.g. wood for furniture, fabric for garment)
- **Fixed costs remain constant over wide ranges of activity**
- 固定成本在廣泛的活動範圍內保持不變
(例如租金和差餉、折舊、監事的薪酬)
(e.g. rent and rates, depreciation, supervisor's salary)

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Concept of Cost – Economical Value

- The nature of cost and business operation (volume) 成本和業務運作的性質 (量) can be reflected as
- Relationship between Y (total cost 總成本) and fixed cost and the variable cost
- 固定成本和可變成本

$$y = a + b x$$

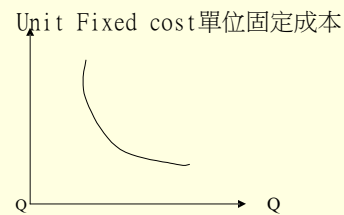
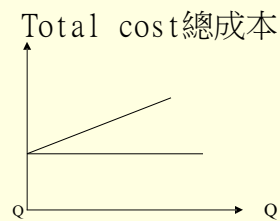
總成本 = 固定成本和可變成本

1-8

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Concept of Cost – Economical Value

- Production cost can be separated into Fixed Cost and Variable Cost 生產成本可以分固定成本和可變成本
- Fixed Cost
 - Total fixed cost 總固定成本: within a time limited, it will not increase
 - Unit fixed cost will decrease and Qty increases



1-9

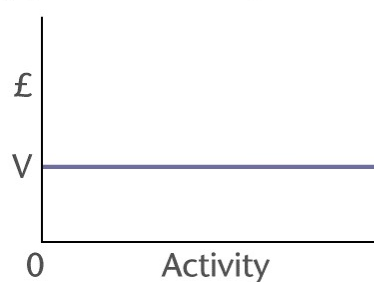
17

Variable and Fixed Costs

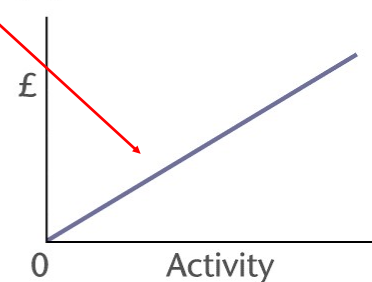
Cost behavior refers to how a cost will react to changes in the level of business activity.

- Total variable costs change in proportion to activity changes.
- 總變動成本隨活動變化而成比例變動。

(a) Variable cost/unit



(b) Total variable cost

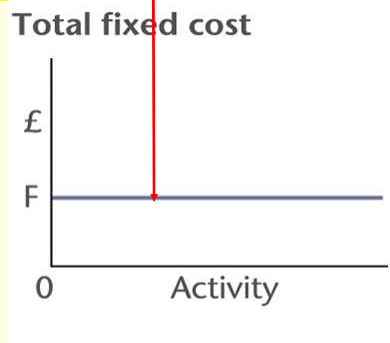


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Variable and Fixed Costs

Cost behavior refers to how a cost will react to changes in the level of business activity.

- **Total fixed costs** do not change when activity changes.
- 總固定成本在活動變化時不會改變。

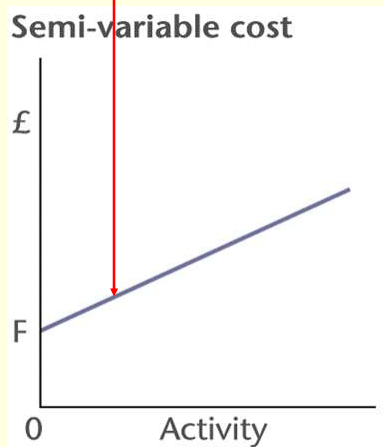


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Variable and Fixed Costs

Cost behavior refers to how a cost will react to changes in the level of business activity.

- **Mixed costs** are combinations of fixed and variable costs.
- 混合成本是固定和可變成本的組合



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Analyze this cost into its fixed and variable elements:

	產量(單位)	總成本
Month	Output(units)	Total cost (£)
Jan	120	6,237
Feb	134	6,269
Mar	140	6,280
Apr	126	6,256
May	110	6,220
Jun	119	6,234

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Answer: High-Low Method question 高至低方法 問題

Highest output (March)	140 units	£6,280
Lowest output (May)	110 units	£6,220
Difference	30 units	£ 60

Variable cost per unit produced = $\text{£}60/30 = \text{£}2$

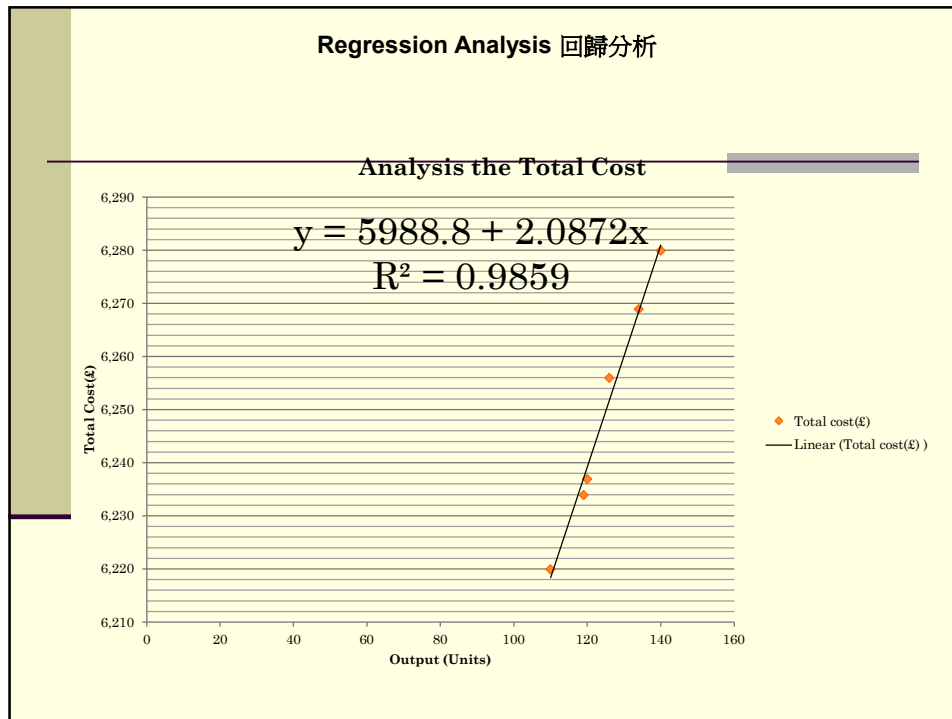
Variable cost of 140 units = $140 \times \text{£}2 = \text{£}280$

Fixed cost (at 140 units) = Total cost – Variable cost
 總成本-可變成本
 = $\text{£}6,280 - \text{£}280$
 = £6,000

*This can be checked by substituting these values in the other month:

In May, £
 Variable cost = $110 \times \text{£}2 = 220$
 Fixed cost = 6,000
 Total cost = 6,220

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Module 3

**Cost-Volume-Profit 成本-成交量-利潤,
and break-even analysis 和平衡分析**

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Key Concepts and Skills

- Understand about the relationship between cost, volume, and profit
了解成本之間的關係、成交量和利潤
- Understand the various forms of break-even analysis
了解各種形式的收支平衡分析

1-1

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Chapter Outline

- 1 Relationship 關係– Cost-Volume-Profit;
- 2 Break-even Analysis 平衡分析;

1-2

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1. Relationship –

成本-成交量-利潤 Cost-volume-Profit

1-3

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Cost Control 成本控制– A key part of Management and control of Financial Resources

Profit = Sales – cost and expenses

利潤 = 銷售 - 成本和費用

- To increase profit and profitability
增加利潤和盈利能力百分比
- Increase sales Qty, Unit sales price
增加營銷數量, 每單位營銷價格
- Reduce cost and expenses
降低成本和費用

1-4

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“Cost-Volume-Profit” – CVP

本量利分析

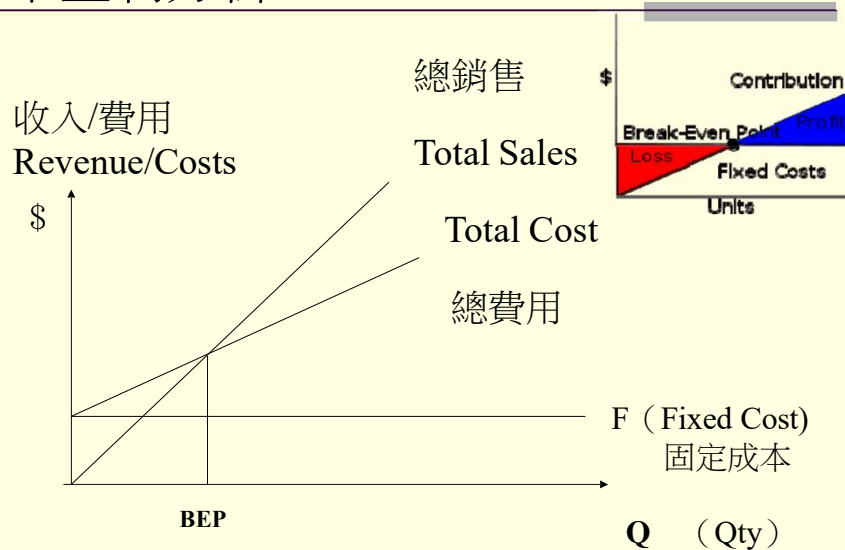
- In a set condition (tax, government, macro-economy), to understand the relationship between cost, volume and profit) 在一定條件下(稅收、政府、宏觀經濟),了解成本、數量和利潤之間的關係)
- Margin contribution increase, product sales profitability increase 毛利/邊際貢獻增加,產品銷售利潤增加
- With limited resources, company should always drive and prioritize for highest margin contributed products first 在有限的資源,公司會以按最高毛利的產品而優先次序

1-11

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“Cost-Volume-Profit” – CVP

本量利分析



1-12

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Contribution Relationships 貢獻關係

£	銷售收入 Sales revenue	貢獻 Contribution	利潤 Profit
		可變成本 Variable costs	固定成本 Fixed costs
0	A	B	C

Columns A and B together illustrate the definition of contribution.

$$\text{Contribution} = \text{Sales revenue} - \text{Variable cost} \quad \text{貢獻} = \text{銷售收入} - \text{可變成本}$$

Columns B and C show the relationship between contribution, fixed costs and profit.

$$\text{Total contribution} = \text{Total fixed costs} + \text{Profit}$$

$$\text{總貢獻} = \text{總固定成本} + \text{利潤}$$

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What is the difference between gross margin and contribution margin?

Net Sales	\$600,000
Cost of Goods Sold	
variable costs	\$120,000
fixed costs	<u>\$200,000</u>
Gross Profit 毛利	\$280,000
Operational Expenses:	
selling and administrative expenses	
銷售及行政開支	
variable expenses	\$40,000
fixed expenses	<u>\$150,000</u>
Total Operational Expenses:	<u>\$190,000</u>
Net Profit	\$90,000

Net Sales	\$600,000
Variable costs 可變成本	
Cost of Goods Sold	\$120,000
Selling and Adm. Exp.	<u>\$40,000</u>
Contribution Margin 貢獻	\$440,000
Fixed costs 固定成本	
Cost of Goods Sold	\$200,000
Selling and Adm. Exp.	<u>\$150,000</u>
Total fixed Costs	<u>\$350,000</u>
Net Profit	\$90,000

邊際貢獻是，成果減去投入的人力物力。就是，
銷貨收入減去變動成本（扣除店面租金的固定成本）。

生產一樣產品所能帶來的收入收回固定成本

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“成本-成交量-利潤” - CVP

CVP分析

單一產品-平衡點 (BEP)

總貢獻 = 總銷售收入 - 總可變成本 ----- (1)

總貢獻 = 總固定成本 + 利潤 ----- (2)

如 利潤 = 0 和 (1) = (2); 總銷售收入 - 總可變成本 = 總固定成本

數量(平衡點) × 每單位銷售價 - 數量 × 每單位可變成本 = 總固定成本

數量(平衡點) × (每單位銷售價 - 每單位可變成本) = 總固定成本

平衡點(數量) = 總固定成本 / (每單位銷售價 - 每單位可變成本)

平衡點(數量) = 總固定成本 / 每單位貢獻

1-13

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“Cost-Volume-Profit” - CVP

• CVP analysis

- Single product– Break-even point (BEP)

- Total Contribution = Revenue – Variable Cost ----- (1)

Total Contribution = Total Fixed Cost + Profit ----- (2)

If Profit = 0 和 (1) = (2); Revenue – Variable Cost = Total Fixed Cost

Qty_{BEP} × Unit Price - Qty_{BEP} × Unit variable cost = Total Fixed Cost

Qty_{BEP} × (Unit Price – Unit variable cost) = Total Fixed Cost

Qty_{BEP} = Total fixed cost / (Unit Price – Unit variable cost)

Qty_{BEP} = Total fixed cost / Unit Contribution

1-13

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2單一產品-平衡點BEP

$$\text{平衡點(數量)} = \frac{\text{固定成本}}{\text{貢獻每單位}}$$

- 如: IPAD (HK STORE)*
 - 每月總固定成本=每月租金+雇員每月薪酬與強積金+每月公用費用和保險費用 = \$5,000,000
 - IPAD : 每單位銷售價: \$ 8,000
 - IPAD : 每單位可變成本: \$ 6,000
 - IPAD貢獻每單位: 8000-6000 = \$2000
 - 每月平衡點(數量):
 - \$5,000,000 / \$ (8000-6000)
 - 5,000,000 / 2,000
 - 2,500 unit IPAD
 - * Simple case only (ignore some expenses)

1-14

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2 Single product - BEP

$$\text{Break-even point in units} = \frac{\text{Fixed costs}}{\text{Contribution margin per unit}}$$

營業平衡點每單位 邊際貢獻每單位

- $\text{BEP} = \text{Total fixed cost} / (\text{unit \$} - \text{unit variable cost})$
- Eg. : IPAD (HK STORE)
 - Monthly total fixed cost : rental, salary + utilities/insurance
 - = \$5,000,000
 - IPAD : Unit sales price : \$ 8,000
 - IPAD : Unit cost: \$ 6,000
 - Each IPAD profit contribution : 8000-6000 = \$2000
 - Monthly BEP Quantity :
 - 5,000,000 / (8000-6000)
 - 5,000,000 / 2,000
 - 2,500 unit IPAD

1-14

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例子:單一產品—平衡點(BEP)

銅鑼灣—蟹專賣店: 每月平衡數量

- 每月固定成本
 - 每月租金:\$720,000
 - 雇員每月薪酬與強積金: \$110,000
 - 每月公用費用和保險費用=\$50,000
- 蟹(大):單位售價:\$150(每隻)
- 蟹(大):單位成本: \$ 70(每隻)
- 需要賣多少蟹(大), 維持收支平衡呢?



$$\begin{aligned} \text{Fixed Cost} &= \$720,000 + \$110,000 + \$50,000 \\ \text{BEP} &= \$880,000 / (\$150 - \$70) \text{ each crab} \\ &= 11,000 \text{ crabs} \end{aligned}$$

1-15

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Eg. Single product (BEP)

Causeway Bay – Hairy Crab specialty shop 蟹專賣店
: Monthly break-even Quantity (BEP Q)

Monthly fixed cost

- Monthly Rental:\$720.000
- Monthly Employees salary with MPF: \$110.000
- Monthly utility and insurance = \$50,000

Crab (Large size) : Unit sales price :\$ 150(each)

- Crab (Large) : Unit cost : \$ 70(each)
- How many crab (L) need to sell to break-even ?



1-15

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多種產品(BEP)

銅鑼灣-蟹專賣店: 每月平衡數量

每月固定成本

- 每月租金:\$720,000
- 雇員每月薪酬與強積金: \$110,000
- 每月公用費用和保險費用=\$50,000
- 蟹(中): 單位售價:\$ 50(每隻), 單位成本\$30
- 蟹(小): 單位售價:\$ 20(每隻), 單位成本\$10
- 假設60%蟹(中)銷售收入, 40%蟹(小)銷售收入
- 需要賣多少蟹(中)和蟹(小), 維持收支平衡呢?
- 假設總銷售數量(可供銷售 Given)30,000蟹(中)和50,000蟹(小),



1-16

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Multiple products (BEP)

Causeway Bay – Hairy Crab specialty shop: Monthly break-even Quantity (BEP Q)

- Monthly fixed cost
 - Monthly Rental:\$720,000
 - Monthly Employees salary with MPF: \$110,000
 - Monthly utility and insurance = \$50,000
- Crab (M) : Unit sales price :\$ 50(each), cost \$30
- Crab (S) : Unit sales price :\$ 20(each), cost \$10
- Assume 60% sales revenue from M, 40% from S
- How many crab (M) and Crab (S) need to sell to break- even?
- Assume Total Sales Quantity 30,000 and 50,000 for crab (M) and Crab (S) respectively.



1-16

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“Cost-Volume-Profit” Analysis Multiple products

- BEP Q
- = Total Fixed Cost總固定成本 / Combined Average marginal contribution合併平均邊際貢獻
- Then, calculate the BEP Qty and BEP revenue, and profitability

1-17

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“Cost-Volume-Profit” Analysis Multiple products

Combined Quantity approach合併數量方法

Work out the sales quantity proportion ratios

Establish unit price of each product,

Work out the unit variable cost and marginal unit contribution

BEP (combined)

= Fixed cost / (combined unit price – combined unit variable cost)

平衡點(數量) (合併) = 固定成本 / (合併每單位售價 – 合併每單位可變成本)

- 平衡點(in \$) (合併) = 固定成本 / 合併每單位貢獻率
- = Fixed cost / combined unit marginal contribution rate

1-18

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Total fixed cost \$880,000

	m (Med size crab)	s (Small size crab)
Sales Quantity 總銷售數量(可供銷售 Given)	30000	50000
Unit price單位銷售價格	50	20
Unit marginal contribution單位貢獻	\$20=(50-30)	10=(20-10)
Unit marginal contribution % 單位貢獻率%	40% =\$20/\$50	50% =\$10/\$20

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$$\text{Break-even point in dollars} = \frac{\text{Fixed costs 固定成本}}{\text{Contribution margin ratio 貢獻銷售價格}} \\ \text{平衡點(銷售\$)} \quad \text{(邊際貢獻比率)}$$

- BEP = Fixed cost / combined average marginal contribution rate
 - Product sales proportion: A=60%; B=40%
 - 假設60%蟹(中)銷售收入, 40%蟹(小)銷售收入
 - Combined average marginal contribution 合計平均邊際貢獻%
 - = 40% * 60% + 50% * 40% = 44%
 - BEP = 880,000 / 44% = \$2,000,000

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- 平衡點(in \$) _m BEP_m = 2000000 * 60% = \$1.2M
- 平衡點(in \$) _s BEP_s = 2000000 * 40% = \$0.8M
- 平衡點(數量) _m $Q_m = 1.2M / 50 = 24,000$ unit(中)
- 平衡點(數量) _s $Q_s = 0.8M / 20 = 40,000$ unit
- Target revenue : \$3,000,000,
- EBIT = (3,000,000 * 0.44) - 880,000 = \$440,000
- BEP_m = 3000000 * 60% = \$1.8M
- BEP_s = 3000000 * 40% = \$1.2M
- $Q_m = 1.8M / 50 = 36,000$ (中) units but exceed 30,000 units
- $Q_s = 1.2M / 20 = 60,000$ unit but exceed 50,000 units

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Project Break-Even Analysis

- Common tool for analyzing the relationship between sales volume and profitability
- 通用的工具之間的關係的分析銷售額和盈利能力
- There are three common break-even measures
- Accounting break-even 會計收支平衡:
 - sales volume at which net income 銷售數量的淨收入 = 0
- Cash break-even 現金收支平衡:
 - sales volume at which operating cash flow = 0
 - 銷售額在其中經營現金流量 = 0
- Financial break-even 財務收支平衡:
 - sales volume at which net present value = 0
 - 銷售數量的淨現值 = 0

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Module 4

Financial Statements Analysis and Long-Term Planning 財務報表分析和長期規劃

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Key Concepts and Skills

- Know how to standardize financial statements for comparison purposes 比較目的
- Know how to compute and interpret important financial ratios 財務比率
- Be able to develop a financial plan using the percentage of sales approach 百分比的銷售辦法
- Understand how capital structure and dividend policies affect a firm's ability to grow 資本結構和紅利政策影響公司增長的能力

1-35

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Chapter Outline

1 Financial Statements Analysis

財務報表分析

2 Ratio Analysis比率 分析

3 The Du Pont Identity

杜邦身份

4 Financial Models財政模式

5 External Financing and Growth外部籌資和增長

6 Some Warnings Regarding Financial Planning Models一些注意事項有關財務規劃模式

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1 Financial Statements Analysis

- Common-Size **Balance Sheets** 共同的規模資產負債表
 - Compute all accounts as a percent of **total assets**
 - 計算所有賬戶,佔百分比的**總資產**
- Common-Size Income Statements 共同的規模損益表
 - Compute all line items as a percent of **sales** 計算所有線項目的百分之一的銷售
- Standardized statements make it easier to compare financial information, particularly as the company grows. 標準化報表更容易比較財務資料,特別是作為公司的增長。
- They are also useful for comparing companies of different sizes, particularly within the same industry. 他們也有助於比較公司的不同大小、特別是在同一行業

1-37

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2 Ratio Analysis

- Ratios also allow for better comparison through time or between companies.
比率還允許更好地比較，如通過時間或在公司之間。
- As we look at each ratio, ask yourself:
 - How is the ratio computed? 如何計算比率?
 - What is the ratio trying to measure and why? 試圖衡量的比率是多少,為什麼?
 - What is the unit of measurement 測量單位?
 - What does the value indicate?
 - How can we improve the company's ratio?

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Categories of Financial Ratios

- Z-score – Predicting Bankruptcy 破產
 - Insolvency 清盤 for public list companies (manufacturers or non-manufacturer) (Bankruptcy ??)
- Short-term solvency or liquidity ratios
短期償債能力或流動資金比率
- Long-term solvency or financial leverage ratios
長期償債能力或財務杠杆比率
- Asset management or turnover (Efficiency) ratios
資產管理或營業額(效率)比率
- Profitability ratios 利潤比率
- Market value ratios 市值比率

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The Z-Score Model:

Public, Manufacturers 上市(制造)公司

- Credit scoring models provide a quick, objective way to evaluate creditworthiness.

- 信貸評分模式提供一個快速和客觀的方式,評估信用貸款。

奧爾特曼 Altman's Z-Score = $1.2 * (\text{營運資金} / \text{總資產})$

+ $1.4 * (\text{留存收益} / \text{總資產}) + 3.3 * (\text{息稅前收益} / \text{總資產})$

+ $0.6 * (\text{市場價值的資產} / \text{總負債}) + 0.999 * (\text{銷售} / \text{總資產})$

Altman's Z-Score = $1.2 * (\text{NWC} / \text{Total Assets})$

+ $1.4 * (\text{Accumulated RE} / \text{Total Assets}) + 3.3 * (\text{EBIT} / \text{Total Assets})$

+ $0.6 * (\text{MV Equity} / \text{BV Debt}) + 0.999 * (\text{Sales} / \text{Total Assets})$

$$\text{Z-Score} = 1.2A + 1.4B + 3.3C + 0.6D + 0.999E$$

Z-Score < **1.81** indicates high probability of bankruptcy 高破產的概率

- Z-Score between **1.81 and 2.99** is a grey area 是一個灰色地帶

- Z-Score > **2.99** indicates a low probability of bankruptcy

破產概率低

1-40

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原 Z-score 公式如下:

$$Z = 1.2A + 1.4B + 3.3C + 0.6D + 0.999E.$$

A = 營運資金 / 總資產.

(衡量流動資產在有關的公司規模大小。)

B = 留存收益 / 總資產.

(衡量盈利,反映了公司的年齡和盈利能力。)

C = 息稅前收益 / 總資產.

(衡量營運效率未除利息和稅務,和總資產(長期性)作用因素的影響。)

D = 市場價值的資產 / 總負債.

(增加了市場層面,可以顯示出安全價格波動,可當一個紅旗。)

E = 銷售 / 總資產. 標準衡量,總資產,營業額(有很大不同對於不同的行業)

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原 Z-score 公式如下:

$$Z = 1.2A + 1.4B + 3.3C + 0.6D + 0.999E.$$

A = Working Capital/Total Assets
(Measures liquid assets in relation to the size of the company)

B = Retained Earnings/Total Assets
(Measures profitability that reflects the company's age and earning power)

C = Earnings Before Interest & Tax/Total Assets
(Measures operating efficiency apart from tax as being important to long-term viability)

D = Market Value of Equity/Total Liabilities
(Add market dimension that can show up market price fluctuation as possible a red flag.)

E = Sales/Total Assets. (Standard measure for total asset turnover)

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The Z-Score Model: Private, Non-Manufacturers

Altman's Z-Score = $6.56 \times (\text{NWC} / \text{Total Assets}) + 3.26 \times (\text{Accumulated RE} / \text{Total Assets}) + 1.05 \times (\text{EBIT} / \text{Total Assets}) + 6.72 \times (\text{BV Equity} / \text{Total Liabilities})$

- Z-Score < 1.23 indicates high probability of bankruptcy
- Z-Score between 1.23 and 2.90 is a grey area
- Z-Score > 2.90 indicates a low probability of bankruptcy

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Computing Liquidity Ratios

流動比率、速動比率、現金比率

- 流動比率 = 流動資產 ÷ 流動負債 = $4179.4 / 2003.565$
= 2.09 times (大於1)
如果存貨中有超儲積壓物資時,會造成企業短期償債能力較強的假像。
- 速動比率
= (流動資產 - 存貨) ÷ 流動負債
= $(4179.4 - 143.9) / 2003.565 = 2.01$ times (大於1)
速動比率以扣除變現能力較差的存貨和預付費用作為償付流動負債的基礎,它彌補了流動比率的不足。
- 現金比率 = 現金 ÷ 流動負債 = $(2860.2 + 781.5) / 2003.565 = 1.82$ times
現金比率作為償付流動負債的基礎,但現金持有量過大會對企業資產利用效果產生負作用,該比率不宜過大,相對流動比率和速動比率來說,其作用程度較小。

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Computing Liquidity Ratios

流動比率、速動比率、現金比率

- Current Ratio = Current Assets / Current Liabilities
= $4179.4 / 2003.565 = 2.09$ times
This ratio measures the short-term debt-paying ability of the company. A higher current ratio suggests a strong liquidity position.
- Quick Ratio = (Current Assets – Inventory) / Current Liabilities
= $(4179.4 - 143.9) / 2003.565 = 2.01$ times
This ratio is like the current ratio but excludes current assets such as inventories that may be difficult to quickly convert into cash.
- Cash Ratio = Cash / Current Liabilities
= $(2860.2 + 781.5) / 2003.565 = 1.82$ times
Cash ratio as payment liabilities of the foundation, but they are cash holdings by the management of the use of corporate assets effect a negative position, this ratio should not be too large, the relative Current ratio and quick ratio, this role is small.

1-42

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Is an over-high current ratio (like 5:1) a good thing? 過高的流動比率(如5:1)是好事嗎?

No, because this tells users that the business cannot use its **excess cash efficiently** to generate further income.

Excess cash means the amount of cash left over after settling all liabilities due within the next 12 months.

Businesses should **invest their excess cash** into investments, such as shares, term deposits, and etc to **earn interest**.

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Computing Gearing/Leverage Ratios 計算槓桿比率

- 總負債比率 = $TD/TA = TD/(TD+TE)$ = 總負債 ÷ 總資產
- $= (TA - TE) / TA = (2003.6 + 4117.8) / 8989.5 = 68\%$ (越小越好)
- 資產負債率是綜合反映企業償債能力的重要指標,它通過負債與資產的對比,反映出在企業總資產中,有多少是通過舉債取得的。
- 長期負債/資本比率 = 產權比率 (eqn 9) * 長期負債付利息
- = 長期負債 ÷ 股東權益
- $= (1417 + 1435.118 + 897.179) / 2868.075 = 131\%$ (越小越好)
- 權益乘數又稱股本倍數 (EM) = $TA / TE = 1 + D/E$
- = 總資產 / 股東權益 = $8989.5 / 2868.075$
- $= 1 + (2003.6 + 4117.8) / 2868.075 = 3.134 = 1 + 2.134$
- 表示企業的負債程度,權益乘數越大,企業負債程度越高。該乘數越大,說明股東投入的資本在資產中所占比重越小。它用來衡量企業的財務風險。

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Computing Gearing Leverage Ratios

計算槓桿比率

- Total Debt Ratio = TL/TA = Total Liabilities/Total Assets

$$=(2003.6 + 4117.8) / 8989.5 = 68\%$$
 (smaller is better)

$$= TL/(TL+TE) = (TA - TE) / TA$$

Ratio of liabilities to assets that reflects the overall enterprise debt service capacity of important indicators, which liabilities and assets of the contrast, reflect the total assets of the business (how much is the debt?).
- Debt/Equity = TL / TE = Total Liabilities/Total equities

$$=(2003.6 + 4117.8) / 2868.075 = 2.134$$
- Equity Multiplier (EM) = $TA / TE = TE/TE + TL/TE$
- $= 1 + TL/TE$
- $= 1 + (2003.6 + 4117.8) / 2868.075 = 3.134 = 1 + 2.134$

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- Long Term Debt Ratio *
- $= \text{Long Term Liabilities} / (\text{Total equities})$
- $= (1417 + 1435.118 + 897.179) / 2868.075$
- $= 3749.297 / 2868.075 = 131\%$
- Long Term Debt Ratio* #
- $= \text{Long Term Liabilities} / (\text{Long Term Liabilities} + \text{Total equities})$
- $= (1417 + 1435.118 + 897.179) / (1417 + 1435.118 + 897.179 + 2868.075) =$
 $3749.297 / (3749.397 + 2868.075) = 56.66\%$
- *Loans from the financial instrument only
- # Different point of view

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Computing Gearing Leverage Ratios 計算杠杆比率-支持能力比率

- Times Interest Earned = EBIT / Interest
- 利息保障倍数=息税前收益÷利息费用
- = 1270.2 / 326.966 = 3.88 times
- 它是衡量企業支付負債利息能力的指標。
- It is a measure the ability of the corporate income to pay the interest expense.
- Cash Coverage
- = (EBIT + Depreciation + Amortization) / Interest
- 現金支持能力比率 = (息税前收益+ 折舊+攤銷) / 利息費用
- = (1,270.22 + 113.812) / 326.966
- = 4.23 times
- <https://www.accountingtools.com/articles/2017/5/5/cash->

1-44

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Computing Efficiency Ratio 計算效率比率 - 存貨比率

- 存貨周轉期 Eqn 15
- = 銷貨成本 ÷ 平均存貨
- = 865.721 / 143.940 = 6.01 倍
- 存貨周轉天 Eqn16
- = 365 / 存貨周轉期
- = 365 / 6.01 = 61 天

1-45

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Computing Efficiency Ratio

計算效率比率 - 應收賬款比率

- 應收賬款周轉期 Eqn 17
- = 記賬銷售 ÷ 平均應收賬
- = $2727 / 18.974 = 143.53$ times

- 應收賬款周轉天 Eqn18
- = $365 \text{天} / \text{應收賬款周轉}$
- = $365 \text{天} / 143.53 = 2.54 \text{天} = 3 \text{天}$

應付賬周轉天 = 應付賬 x 365天 / 貨物銷售成本
 = 應付賬 x 365天 / [特許專櫃銷售額 x 90% x (1 - 扣點率) + 貨物銷售成本] = $1144.716 \times 365 / [7455.218 \times 90\% \times (1 - 0.19) + 865.7] = 66 \text{天}$

1-46

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Computing Efficiency Ratio

計算效率比率 - Inventory Ratios

- Inventory Turnover = Cost of Goods Sold / Inventory
 = $865.721 / 143.9 = 6.02$ times

This ratio measures the number of times merchandise is sold and replaced during the year.

- Days' Sales in Inventory = $365 / \text{Inventory Turnover}$
 = $365 / 6.02 = 61$ days

This ratio measures how many days, on average, it takes to sell the inventory.

1-45

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Computing Efficiency Ratio

計算效率比率 - Receivables Ratios

- Receivables Turnover
- = Sales / Accounts Receivable
- = 2727 / 18.974 = 143.53 times
- **Average Collection Period**
- = 365 / Receivables Turnover
- = 365 / 143.53 = 2.54days=3 days
- Normal average of around **45 – 75 days**.

This ratio measures, on average, how many days it takes to collect an account receivable.

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CREDITORS' RATIO 應付帳款比率/ PERIOD OF CREDIT RECEIVED FROM TRADE CREDITORS

Closing Trade Creditors x 365

Cost of Goods Sold

應付賬周轉天= (應付賬 / [特許專櫃銷售額 x (1 - 扣點率) + 貨物銷售成本]) x 365

= 1144.77 x 365 / [7455.218 x 90% x (1 - 0.19) + 865.7]

= 66days

特許專櫃扣點率 19% (百盛, 2010)

Where the period of credit is high compared with other businesses (or the average for the industry), and/or increasing over time, this indicates that the company is delaying paying its creditors.

It may adversely affect a company's credit rating, creditors may refuse to supply further goods on credit, and it could suggest financial weakness.

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Computing Efficiency Ratio 計算效率比率

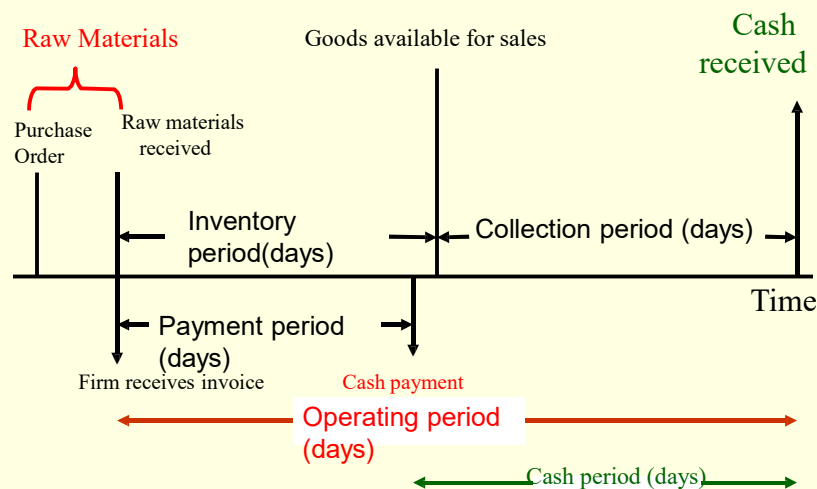
—Total Asset Turnover 總資產周轉率

- 總資產周轉率(TAT) Total Asset Turnover
- = Sales / Total Assets
- = 銷售 ÷ 總資產
- = $2726.983 / 8989.465 = 0.30 \text{ times}$
- 轉率越大，說明總資產周轉越快，反映出銷售能力越強。
 - 這是平常的 $TAT < 1$, 如果公司有大量的固定資產
- It is usual for $TAT < 1$, especially if a firm has a large amount of fixed assets.

1-47

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2. Operating period and Cash period



1-61

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Operating period and Cash period

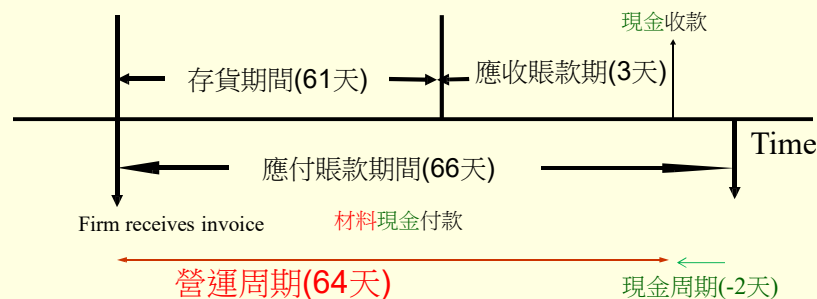
Operating period (days)營運周期(天) = 存貨期間(天) + 應收賬款期(天)
 = Inventory period (days) + Collection period (days)
 = 61 days + 3 days = 64 days

Cash period現金周期(days) = Operating period (days) - Payment period (days)
 = 營運周期(天) - 應付賬款期(天) = 64 - 66 days = -2 days

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Example

- 應付賬款期間(天) = 66 days
- 現金周期(天) = 營運周期(天) - 應付賬款期(天)
 = 存貨期間(天) + 應收賬款期(天) - 應付賬款期(天) = 64 - 66 = **-2天**
- 如果我們想至減少我們籌資需要, 我們需要認真看待我們應收賬款和存貨期間。



-65

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Computing Profitability Ratio 計算利潤比率

- 毛利率 = (銷售收入 - 銷貨成本) ÷ 銷售收入 Eq n 2 5

$$= (2727 - 865.7) / 2727 = 68.3\%$$
 (越大越好)
 該指標反映每一元銷售收入帶來的毛利的多少，表示銷售收入的收益水平。
- 总资产收益率 (税后) (ROA)

$$= \text{淨利} / \text{总资产}$$

$$= 727.8 / 8989.5 = 8.1\%$$

 它是用來衡量每單位資產創造多少淨利潤
- 股本回報率 (税后) (ROE)

$$= \text{淨利} / \text{股東權益} = 727.8 / 2868.075 = 25.4\%$$
- 是衡量相對於股東權益的投資回報之指標
- EBITDA Margin 未計利息、稅項、折舊及攤銷前的利潤差額

$$= \text{未計利息、稅項、折舊及攤銷前的利潤} / \text{銷售收入}$$

$$= (727.8 + 327 + 215.451 + 113.812) / 2727 = 50.75\%$$

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Computing Profitability Measures

Gross Profit Margin

$$= (\text{Sales} - \text{Cost of Goods Sold}) / \text{Sales}$$

$$= (2727 - 865.7) / 2727 = 68.3\%$$

Net Profit Margin = Net Income after tax / Sales

$$= 727.801 / 2727 = 26.69\%$$

- EBITDA Margin = EBITDA/Sales
- $$= (727.801 + 326.966 + 215.451 + 113.812) / 2727$$
- $$= 50.75\%$$

- Return on Assets (ROA after tax)

$$= \text{Net Income after Tax} / \text{Total Assets}$$
- $$= 727.8 / 8989.5 = 8.1\%$$

It is used to measure per unit asset creation how much net profit.

- Return on Equity (ROE after tax)

$$= \text{Net Income after Tax} / \text{Total Equity}$$
- $$= 727.8 / 2868.075 = 25.4\%$$

The measure is corresponding to shareholders' equity investment in the company's index.

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衡量市場價值

市場 資本化 Market Capitalization

= \$18.79/1.074 per share x 557219 000 shares

= 9700 百萬人民幣 (97 億人民幣)

市盈率 Price Earning Ratio = 股票每股市價 ÷ 每股盈利 EPS

= (18.79/1.074) / (727/557) = 17.50 / 1.31 = 13.4 (倍)

市盈率是最常用來評估股價水平是否合理的指標之一。
(越大越貴)

市場對賬面比率 Market-to-book ratio

= 股票每股市價 / 每股賬面價

= (18.79 / 1.074) / (2868.1 / (557.219)) = 3.40 times

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Using Financial Statements

使用財務報表



- Ratios are not very helpful by themselves
- 比率本身是不很有幫助的: they need to be compared to something 他們需要比較
- Time-Trend Analysis 時間趨勢分析
 - Used to see how the firm's performance is changing through time
- Peer Group Analysis
 - Compare to similar companies or within industries
 - 比較 類似的公司或行業
 - hkexnews.hk 香港交易所
 - Standard Industrial Classification (SIC) and North American Industrial Classification System (NAICS) codes which were developed by the US federal government

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Using Financial Statements



Time-Trend Analysis 時間趨勢分析 (At least **3 years**)

Used to see how the firm's performance is changing through **time**

- Compare the trend and changes (both in absolute and percentage)
- Balance Sheet,
- Income Statement

Financial Ratios Trends – each of the factors/ratios should be **analyzed and compared and identify the trend** and the cause of the changes for better **forecast the future** and make proactive plan for **improvement** 趨勢--每個因素/比率應分析和比較和確定的事業的趨勢和變化的更好地預測未來,作出積極的改善計劃

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Basics of Analysis

分析的基礎知識

Reduces
uncertainty

Application of
analytical
tools

Involves
transforming
data

Financial statement analysis helps users make better decisions. 財務報表分析可以幫助使用者做出更好的決策。

Internal Users (內部用戶)

Managers 經理
Officers 人員
Internal Auditors 內部審計師



External Users (外部用戶)

Shareholders 股東
Lenders 銀行
Customers 客戶

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Standards for Comparison
比較標準

To help me interpret our financial statements, I use several standards of comparison.
為了說明我解釋我們的財務報表,我使用幾個比較標準



- ① Intracompany 公司內部
- ② Competitors 競爭對手
- ③ Industry 行業
- ④ Guidelines 指引

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Tools of Analysis 分析工具

Dollar & Percentage Changes 元和百分比變化	Trend Percentages 趨勢百分比
Component Percentages 成分百分比	Ratios 比率

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Tools of Analysis 分析工具

Horizontal Analysis 橫向分析

Comparing a company's financial condition and performance across time.

Vertical Analysis 縱向分析

Comparing a company's financial condition and performance to a base amount.

Ratio Analysis 比率分析

Measurement of key relations between financial statement items.

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Horizontal Analysis 橫向分析

Best Buy Comparative Balance Sheet (in millions) March 31, 2017 and February 25, 2016

	2017	2016	Dollar Change	Percent Change
Cash and cash equivalents	\$ 1,205	\$ 748	\$ 457	61.1%
Short-term investments	2,588	3,041	-453	-14.9%
Receivables, net	548	449	99	22.0%
Merchandise inventory	4,028	3,338	690	20.7%
Other current assets	712	409	303	74.1%
Total current assets	9,081	7,985	1,096	13.7%
Property and equipment	4,904	4,836	68	1.4%
Less: accumulated depreciation	1,966	2,124	-158	-7.4%
Net property and equipment	2,938	2,712	226	8.3%
Goodwill	919	557	362	65.0%
Trade names	81	44	37	84.1%
Long-term investments	318	218	100	45.9%
Other long-term assets	233	348	-115	-33.0%
Total assets	\$ 13,570	\$ 11,864	\$ 1,706	14.4%

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Comparative Statements

Calculate Change in Dollar Amount

$$\text{Dollar Change} = \text{Analysis Period Amount 分析期金額} - \text{Base Period Amount 「基準」期金額}$$


Since we are measuring the amount of the change between 20X6 and 20X7, the dollar amounts for **20X6** become the **"base"** period amounts.
由於我們衡量的是 20X6 和 20X7 之間的變化量，因此 20X6 的金額成為「基準」期金額。

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Comparative Statements

Calculate Change as a Percent

$$\text{Percent Change} = \frac{\text{Dollar Change}}{\text{Base Period Amount 「基準」期金額}} \times 100$$


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HORIZONTAL ANALYSIS

横向分析

Best Buy
 Comparative Balance Sheet (in millions)
 March 31, 20X7 and February 25, 20X6

	20X7	20X6	Dollar Change	Percent Change
Cash and cash equivalents	\$ 1,205	\$ 748	\$ 457	61.1%
Short-term investments	2,588	3,041	(453)	-14.9%
Receivables, net	548	449	99	22.0%
Merchandise inventory	4,028	3,338	690	20.7%
Other current assets			3	74.1%
Total current assets			6	13.7%
Property and equipment	4,904	4,836	68	1.4%
Less: accumulated depreciation				
Net property and equipment				
Goodwill	919	557	362	65.0%
Trade names	81	44	37	84.1%
Long-term investments	318	218	100	45.9%
Other long-term assets	233	348	(115)	-33.0%
Total assets	\$ 13,570	\$ 11,864	\$ 1,706	14.4%

$\$1,205 - \$748 = \$457$

$(\$457 \div \$748) \times 100 = 61.1\%$

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P1

HORIZONTAL ANALYSIS

横向分析

Best Buy
 Comparative Balance Sheet (in millions)
 March 31, 20X7 and February 25, 20X6

	20X7	20X6	Dollar Change	Percent Change
Cash and cash equivalents	\$ 1,205	\$ 748	\$ 457	61.1%
Short-term investments	2,588	3,041	(453)	-14.9%
Receivables, net	548	449	99	22.0%
Merchandise inventory	4,028	3,338	690	20.7%
Other current assets			3	74.1%
Total current assets			6	13.7%
Property and equipment	4,904	4,836	68	1.4%
Less: accumulated depreciation				
Net property and equipment	2,938	2,712	226	8.3%
Goodwill	919	557	362	65.0%
Trade names	81	44	37	84.1%
Long-term investments	318	218	100	45.9%
Other long-term assets	233	348	(115)	-33.0%
Total assets	\$ 13,570	\$ 11,864	\$ 1,706	14.4%

$\$1,205 - \$748 = \$457$

$(\$457 \div \$748) \times 100 = 61.1\%$

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Horizontal Analysis
横向分析

P 1

(in millions, except per share amounts)	20X7	20X6	Dollar change	Percent Change
Revenues	\$35,934	\$30,848	\$5,086	16.5%
Cost of goods sold	27,165	23,122		
Gross profit	8,769	7,726		
Selling, general, and administrative expenses	6,770	6,082		
Operating Income				
Net interest income (expense)				
Gain on investments	20	0		
Earnings from continuing operations before income tax expense				
Income tax expense				
Minority interest in earnings	1	0		
Net earnings	\$ 1,377	\$ 1,140		
Basic earnings per share	\$ 2.86	\$ 2.33		
Diluted earnings per share	\$ 2.79	\$ 2.27		

$\$35,934 - \$30,848 = \$5,086$
 $(\$5,086 \div \$30,848) \times 100 = 16.5\%$

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Horizontal Analysis 横向分析

(in millions, except per share amounts)	20X7	20X6	Dollar change	Percent Change
Revenues	\$35,934	\$30,848	\$5,086	16.5%
Cost of goods sold	27,165	23,122	4,043	17.5%
Gross profit	8,769	7,726	1,043	13.5%
Selling, general, and administrative expenses	6,770	6,082	688	11.3%
Operating Income	1,999	1,644	355	21.6%
Net interest income (expense)	111	77	34	44.2%
Gain on investments	20	0	20	
Earnings from continuing operations before income tax expense	2,130	1,721	409	23.8%
Income tax expense	752	581	171	29.4%
Minority interest in earnings	1	0	1	
Net earnings	\$ 1,377	\$ 1,140	237	20.8%
Basic earnings per share	\$ 2.86	\$ 2.33	\$ 0.53	22.7%
Diluted earnings per share	\$ 2.79	\$ 2.27	\$ 0.52	22.9%

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P1 →

Trend Analysis 趨勢分析




Trend analysis is used to reveal patterns in data covering successive periods.

趨勢分析用於揭示連續時期的資料模式。

$$\text{Trend Percent} = \frac{\text{Analysis Period Amount (分析期金額)}}{\text{Base Period Amount (「基準」期金額)}} \times 100$$

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P1 →

Trend Analysis 趨勢分析

Best Buy
Income Statement Information
For the Fiscal Year

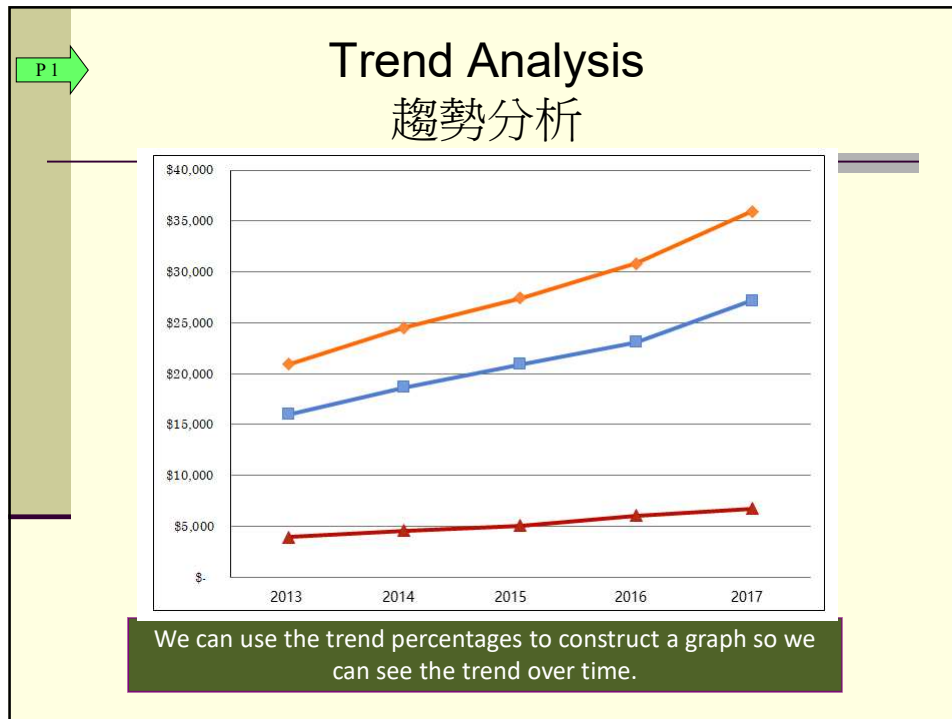
(in millions)	2017	2016	2015	2014	2013
Revenues	\$ 35,934	\$ 30,848	\$ 27,433	\$ 24,548	\$ 20,943
Cost of goods sold	27,165	23,122	20,938	18,677	15,998
SG&A expenses	6,770	6,082	5,053	4,567	3,935

Using 2003 as the base year we will get the following trend information:

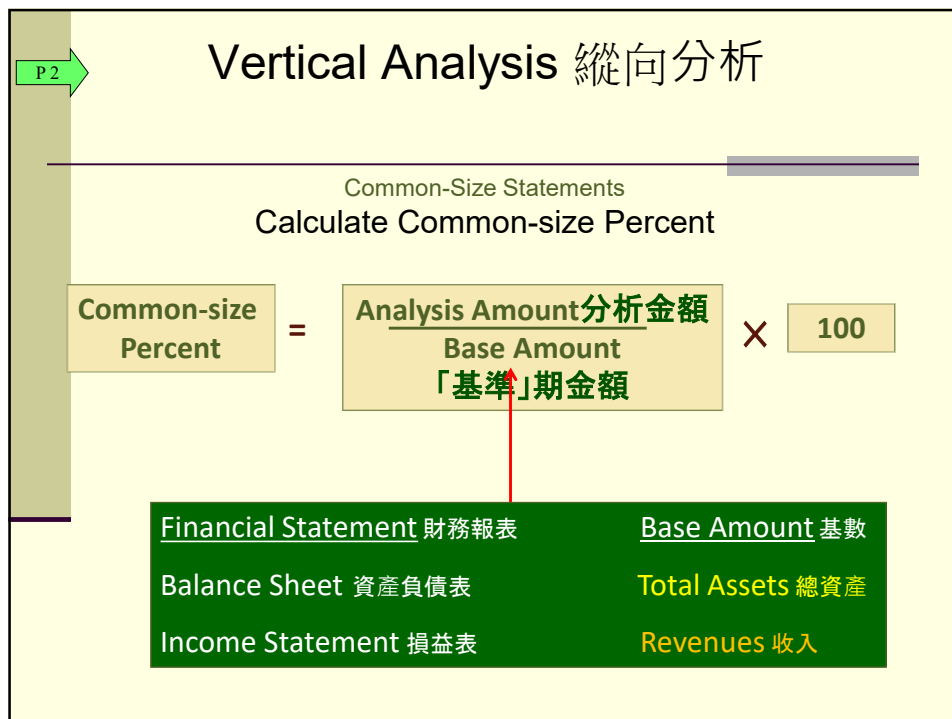
	2017	2016	2015	2014	2013
Revenues	171.6%	147.3%	131.0%	117.2%	100.0%
Cost of goods sold	169.8%	144.5%	130.9%	116.7%	100.0%
SG&A expenses	172.0%	154.6%	128.4%	116.1%	100.0%

$(\$24,548 \div \$20,943) \times 100 = 117.2$

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P 2 →

Common-Size Balance Sheet 資產負債表

Best Buy Comparative Balance Sheet March 3, 20X7, and February 25, 20X6				
(in millions)	20X7	20X6	Common-Size %	
			20X7	20X6
Assets				
Cash and cash equivalents	\$ 1,205	\$ 748	8.9%	6.3%
Short-term investments	2,588	3,041		
Receivables, net	548	449		
Merchandise inventory	4,028	3,338		
Other current assets	712	409		
Total current assets				
Property and equipment	4,904	4,836		
Less: accumulated depreciation	1,966	2,124		
Net property and equipment				
Goodwill	919	557		
Trade names	81	44		
Long-term investments	318	218		
Other long-term assets	233	348		
Total assets	\$ 13,570	\$ 11,864	100.0%	100.0%

$(\$1,205 \div \$13,570) \times 100 = 8.9\%$
 $(\$748 \div \$11,864) \times 100 = 6.3\%$

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P 2 →

Common-Size Balance Sheet 資產負債表

Best Buy Comparative Balance Sheet March 3, 20X7, and February 25, 20X6				
(in millions)	20X7	20X6	Common-Size %	
			20X7	20X6
Assets				
Cash and cash equivalents	\$ 1,205	\$ 748	8.9%	6.3%
Short-term investments	2,588	3,041	19.1%	25.6%
Receivables, net	548	449	4.0%	3.8%
Merchandise inventory	4,028	3,338	29.7%	28.1%
Other current assets	712	409	5.2%	3.4%
Total current assets	9,081	7,985	66.9%	67.3%
Property and equipment	4,904	4,836	36.1%	40.8%
Less: accumulated depreciation	1,966	2,124	14.5%	17.9%
Net property and equipment	2,938	2,712	21.7%	22.9%
Goodwill	919	557	6.8%	4.7%
Trade names	81	44	0.6%	0.4%
Long-term investments	318	218	2.3%	1.8%
Other long-term assets	233	348	1.7%	2.9%
Total assets	\$ 13,570	\$ 11,864	100.0%	100.0%

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Common-Size Income Statement 損益表

P 2 →

(in millions, except per share amounts)	20X7	20X6	Common-Size %	
			20X7	20X6
Revenues	\$35,934	\$30,848	100.0%	100.0%
Cost of goods sold	27,165	23,122	75.6%	75.0%
Gross profit	8,769	7,726	24.4%	25.0%
Selling, general, and administrative expenses	6,770	6,082	18.8%	19.7%
Operating Income	1,999	1,644	5.6%	5.3%
Net interest income (expense)	111	77	0.3%	0.2%
Gain on investments	20	0	0.1%	0.0%
Earnings from continuing operations before income tax expense	2,130	1,721	5.9%	5.6%
Income tax expense	752	581	2.1%	1.9%
Minority interest in earnings	1	0	0.0%	0.0%
Net earnings	\$ 1,377	\$1,140	3.8%	3.7%

$$(\$27,165 \div \$35,934) \times 100 = 75.6\%$$

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Using Financial Statements



Peer Group Analysis (Total – min 3+1 = **4 companies**)

Compare to similar companies or within industries - SIC and NAICS codes (Peer Industry Average) – Alternative – you can use the largest 4 companies in your picked industry and project an industry average for comparison

Mainly compare all the key financial ratios among the peer “selected” companies and compare their 3 years ratios, and the “selected” industry average

Critically analysis the difference and trends, and then identify the cause of the changes, which can be **macro or micro (internal) causes**認真分析的差異和趨勢,然後確定導致的變化,這可以是宏觀和微觀(內部)原因

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Using Financial Statements Peer Group - Comparison



Quick Ratio (Times)	Co A	Co. B	Co. C	Industry Average
20X1	1.4	2.2	3	1.7
20X2	1.6	2	2	1.8
20X3	1.7	1.4	1.1	1.3

Do this for each key financial ratios
Trends of Peers, comparing to CoA. Why ?

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3 The Du Pont Identity

杜邦等式(The Du Pont Identity)“==什麼是杜邦等式==

杜邦等式是杜邦公司所創，用於理解淨資產收益率的決定因素。淨資產收益率取決於獲利能力(用銷售淨利率衡量)，資產管理效率(用資產周轉率衡量)和財務杠桿(用權益乘數衡量)。
淨資產收益率 = 銷售淨利率 × 資產周轉率 × 權益乘數

要想提高銷售淨利率，一方面要擴大銷售收入，一方面要降低成本費用。資產周轉率反映了企業資產占用與銷售收入之間的關係，影響資產周轉率的一個重要因素是資產總額。杜邦結構圖均可見：銷售淨利率越大，資產淨利率越大；資產周轉率越大，資產淨利率越大；而資產淨利率越大，則淨資產收益率越大。權益乘數對淨資產收益率具有倍率影響，權益乘數主要受資產負債率指標的影響。在資產總額不變的條件下，適度開展負債經營，可以減少所有者權益所占的份額，從而達到提高淨資產收益率的目的。

根據公式得到提高淨資產收益率有以下途徑：

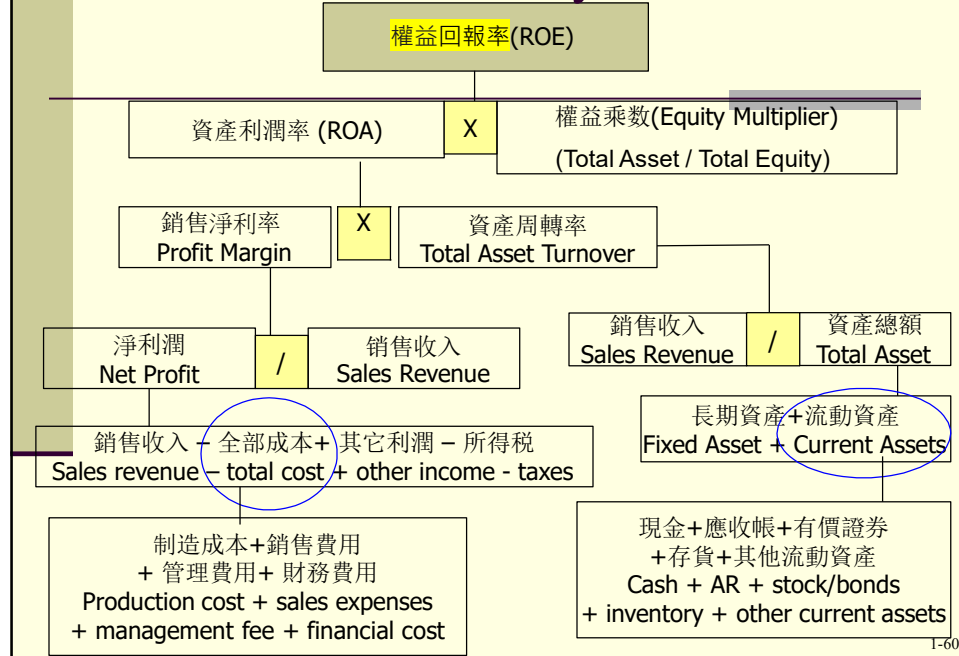
- ①加強資產管理，提高資產周轉率；
- ②加強負債管理，提高資產負債率；
- ③加強銷售管理，提高銷售淨利潤率。



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3. The Du Pont Identity



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3. The Du Pont Identity

- $ROE = NI / TE = \text{息稅後收益} \div \text{股東權益} = 727.8 / 2868.1 = 25.4$
- Multiply by 1 and then rearrange:
 - $ROE = (NI / TE) (TA / TA)$
 - $ROE = (NI / TA) (TA / TE) = ROA * EM$
- Multiply by 1 again and then rearrange:
 - $ROE = (NI / TA) (TA / TE) (Sales / Sales)$
 - $ROE = (NI / Sales) (Sales / TA) (TA / TE)$
 - $ROE = PM * TAT * EM$

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Using the Du Pont Identity

- $ROE = PM * TAT * EM$
 - **銷售淨利** (PM) 是一個衡量該公司的營運效率--它如何控制成本
 - **Profit margin** is a measure of the firm's operating efficiency – how well it controls costs.
 - **資產周轉率** (TAT) 是一個衡量該公司的資產使用效率--它如何管理其資產
 - **Total asset turnover** is a measure of the firm's asset use efficiency – how well it manages its assets.
 - 權益倍數(EM)是衡量該公司的**財務杠杆**
 - Equity multiplier is a measure of the firm's financial leverage.

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Calculating the Du Pont Identity

總資產收益率（稅後）ROA

= 息稅後收益 ÷ 總資產 = $727.8 / 8989.5 = 8.1\%$ & $EM = 3.13$

- 股本回報率 $ROE = 8.1\% * 3.13 = 25.4\%$
- 銷售淨利率 $PM = 26.69\%$ and 資產周轉率 $TAT = 30.3$
- 股本回報率 $ROE = 26.69\% * 30.3 * 3.13 = 25.4\%$

Use 百盛 case:

是衡量相對於股東權益的投資回報之指標

股本回報率 ROE = 25.4

它是用來衡量每單位**資產**創造多少淨利潤

總資產收益
率（稅後） ROA = 8.1

X

權益倍數 EM = $8989.5 / 2868.1 = 3.13$
(總資產 / 股東權益)

銷售淨利率
Profit Margin = $727.8 / 2727 = 0.2669$

X

資產周轉率
Total Asset Turnover = 30.3

該指標反映每一元銷售收入帶來的淨利潤的多少，表示銷售收入的收益水平。

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Potential Problems

- There is no underlying theory, so there is no way to know which ratios are **most relevant**.
- 是無基本理論,所以是無方法知道比率是最重要的。
- **Benchmarking** is difficult for diversified firms.
- 多樣化公司**基准**是困難。
- Globalization and international competition makes comparison more difficult because of **differences in accounting regulations**.
- 全球化和國際競爭作出比較更難,因為在會計規章差異。
- Firms use varying **accounting procedures**. 公司使用不同會計程序.
- Firms have different **fiscal years**. 公司有不同財政年.
- **Extraordinary** 非尋常, **or one-time, events** 或一個時間活動

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4. Financial Models

- Investment in new assets – determined by **capital budgeting decisions**
- 投資在新的資產-- 確定**資本預算**的決定
- Degree of financial leverage – determined by **capital structure decisions**
- 程度的財務杠杆手段-- 確定**資本結構**的決定
- Cash paid to shareholders – determined by **dividend policy decisions**
- 現金支付予股東- 確定**股息政策**的決定
- Liquidity requirements – determined by **net working capital decisions**
- 流動資金的需求--由**淨周轉資金**決定

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Financial Planning Ingredients

財務規劃材料

- Sales Forecast – many cash flows depend directly on the level of sales (often estimate sales growth rate)銷售預測-許多現金流動直接取決於該水平的銷售(往往估計銷售增長率)
- Pro Forma Statements – setting up the plan as projected (pro forma) financial statements allows for consistency and ease of interpretation預計(估價單)財務報表可以一致性和便於解釋
- Asset Requirements – the additional assets that will be required to meet sales projections資產要求的--更多的資產,將須符合銷售預測
- Financial Requirements – the amount of financing needed to pay for the required assets所需經費數額--所需經費的籌措支付所需的資產
- Plug Variable – determined by management decisions about what type of financing will be used (makes the balance sheet balance)確定的管理決定什麼類型的籌資將使用(使資產負債表平衡)
- Economic Assumptions – explicit assumptions about the coming economic environment經濟假設-明確假設關於未來經濟環境

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留存收益率

- 內部增長率告訴我們,使用多少保留收入,公司可以增加資產的唯一來源的資金。
- 從使用百盛公司的信息。

$$\begin{aligned}
 &= \text{留存收益} \div \text{稅後淨利} \\
 &= 2,731.10 \div 727.8 \\
 &= 3.8 \text{ (倍)}
 \end{aligned}$$

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持續增長率

The Sustainable Growth Rate

- 衡量公司增長力的指標(不靠向外借款)
- The sustainable growth rate tells us how much the firm can grow by **using internally generated funds and issuing debt to maintain a constant debt ratio.**
- 使用百盛公司的信息:
- Sustainable Growth Rate
 - = 留存收益 ÷ 股東權益 = Retained Earning ÷ Equity
 - = 2,731.1 ÷ 2,868.1
 - = 95.2%

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Determinants of Growth

- Profit margin – operating efficiency 利潤-經營效率
- Total asset turnover – asset use efficiency
- 總資產營業額-資產使用效率
- Financial leverage – choice of optimal debt ratio
- 財務杠杆-選擇最佳債務比率
- Dividend policy – choice of how much to pay to shareholders versus reinvesting in the firm
- 股息政策--選擇有多少付給股東與再投資的公司

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6. Some Warnings 一些注意事項

- Financial planning models do not indicate which financial policies are the best. 財政規劃模型不會表明,財政政策是最好的。
- Models are simplifications of reality, and the world can change in unexpected ways.
- 模式是簡化的現實,世界可以改變的意外的方式。
- Without some sort of plan, the firm may find itself adrift in a sea of change without a rudder for guidance. 如果沒有某種形式的計劃,該公司可能會發現自己漂泊在海上的變革而無一個舵的指導。

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Module 5

An Introduction

- 長期籌資(股票、債券)

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股票證書和轉讓

每一個單位的擁有權是一個叫 **股票**。一個股票證書作為證據,證明已購買股份的股東。



當股票出售時, 股東該股票證書背後 **簽署轉讓**。

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基本的資本股票

總數量的股票, 公司的法定出售

Stockholders' Equity

Common Stock, par value \$0.01;
authorized 250,000,000 shares; **issued**
 and outstanding 92,556,295 shares \$925,563

總金額的股票,已發行或出售給股東

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基本的資本股票

Par value or Face value 股票面值 is an arbitrary amount assigned to each share of stock when it is authorized.

面值或面值股票面值是授權時分配給每股股票的任意金額。

≠

Market price is the amount that each share of stock will sell for in the market.

市場價格是每股股票是市場上出售的金額。

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現金股息

經常用現金股息回報率為投資者和幾乎總是影響股票的市場價值。



Corporation



Dividends

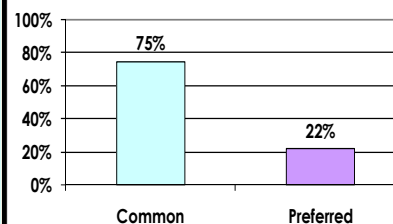


Stockholders

支付的現金紅利的公司必須有：

1. 一個足夠的留存收益, 和
(A sufficient balance in retained earnings and)
2. 所需的現金支付的股息.
The cash necessary to pay the dividend.

% of Corporations Paying Divids



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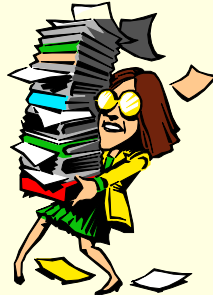
現金股息

三個重要日期



Date of Declaration 日期的宣布

**Record liability
for dividend.**



Date of Record 日期的記錄

**No entry
required.**



Date of Payment 支付日期

**Record payment of
cash to stockholders.**

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股票股息 Stock Dividends

公司分配的股份,其股東沒有收到任何付款的回報。

為何一個股票分紅呢？

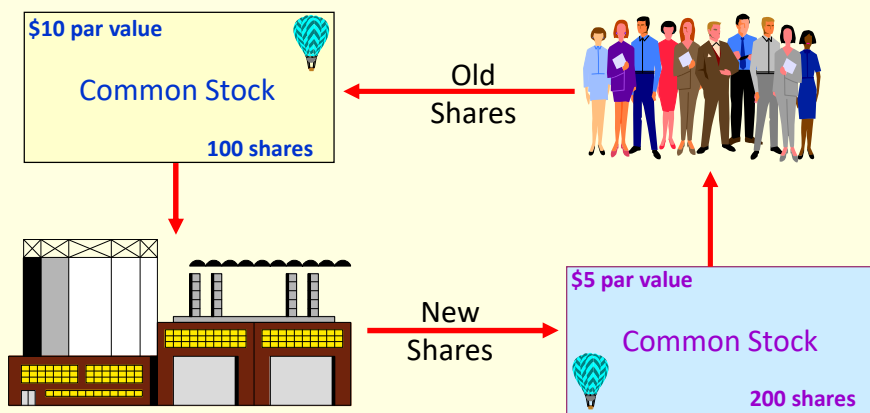
- 保持股票市場的價格。
- 可提供證據的管理的信心,該公司是做得很好。



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股票分拆

一個分配額外股份,股東按其%所有權
A distribution of additional shares of stock to stockholders according to their percent ownership.



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股票分拆

	Before Split	After Split	
Common Stock Shares	5,000	10,000	增加 Increase
Par Value per Share	\$ 1.00	\$ 0.50	減少 Decrease
Total Par Value	\$ 5,000	\$ 5,000	沒有改變 No Change



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优先股

Cumulative 累積	vs.	Noncumulative 非累積
股息拖欠攤款前必須繳付股息 支付可能會對本公司普通股。 (正常情況下)		從目前未申報股息和前幾年 沒有支付在今後幾年。

請考慮以下股東權益科的資產負債表。董事會不宣布或支付股息在2009年。在2010年,該局宣布及支付的現金股息 **42,000元**。

Common stock, \$5 par value; 40,000 shares authorized, issued and outstanding	\$ 200,000
Preferred stock, 9%, \$100 par value; 1,000 shares authorized法定, issued and outstanding	<u>100,000</u>
Total Paid-In capital	<u>\$ 300,000</u>

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Preferred Stock

If Preferred Stock is Noncumulative 非累積:

Year 2009: No dividends paid.

Preferred	Common
\$ -	\$ -

Year 2010:

1. Pay 2010 preferred dividend.

\$ 9,000

2. Remainder goes to common.

\$ 33,000

If Preferred Stock is Cumulative 累積:

Year 2009: No dividends paid.

Preferred	Common
\$ -	\$ -

Year 2010:

1. Pay 2009 preferred dividend in arrears.

\$ 9,000

2. Pay 2010 preferred dividend.

9,000

3. Remainder goes to common.

\$ 24,000

Totals

\$ 18,000

\$ 24,000

60

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Preferred Stock 優先股

Reasons for Issuing Preferred Stock 發行優先股的原因

- To raise capital without sacrificing **control** 在不犧牲控制的情況下籌集資金
- To boost the **return earned** by common stockholders through **financial leverage** 通過財務槓桿提高普通股股東的回報
- To appeal to investors who may believe the common stock is **too risky** or that the expected return on common stock is **too low** 吸引那些可能認為普通股風險過高或普通股預期回報率過低的投資者

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Thanks

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Module 6

Discounted Cash Flow Valuation 折現現金流量估值

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Key Concepts and Skills

- Be able to compute the future value and/or present value of a **single cash flow** or series of cash flows 能夠計算價值的未來和/或現值的一個單一現金流量或系列現金流動
- Be able to compute the **return on an investment** 能夠計算回報的投資
- Be able to use a financial calculator and/or spreadsheet to solve time value problems 能使用一個財務計算機和/或試算表於解決時間值問題

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1

Chapter Outline

- 1 Valuation: The One-Period Case 估值:一個時期的個案
- 2 The Multiperiod Case 多期的個案
- 3 Compounding Periods 複利期
- 4 Simplifications 簡化
- 5 Loan Amortization 貸款攤銷
- 6 What Is a Firm Worth 一個公司值什麼?

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3

1 The One-Period Case

一個時期的個案

- If you were to invest \$10,000 at 5-percent interest for one year, your investment would grow to \$10,500.
- 如果你投資\$10,000在一年利息5%，你投資會增長至10,500元。

\$500 would be interest ($\$10,000 \times .05$)

\$10,000 is the principal repayment ($\$10,000 \times 1$)

\$10,500 is the total due. It can be calculated as:

$$\$10,500 = \$10,000 \times (1.05)$$

- The total amount due at the end of the investment is call the *Future Value (FV)*. 投資的總款額是 **未來值 (FV)**

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2

Future Value 未來值

- In the one-period case, the formula for *FV* can be written as:

$$FV = C_0 \times (1 + r)$$

Where C_0 is cash flow today (time zero), and r is the appropriate interest rate.

凡 C_0 是 現金流量(時間零),

r 是 適當的利率。

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Present Value 現值

- If you were to be promised \$10,000 due in one year when interest rates are 5-percent, your investment would be worth \$9,523.81 in today's dollars.
- 如果你是要將承諾\$10,000由於在一年, 利息率是 5%, 你投資將會在今天的值(現值)9,523.81元

$$\text{\$9,523.81} = \frac{\text{\$10,000}}{1.05}$$

The amount that a borrower would need to set aside today to be able to meet the promised payment of \$10,000 in one year is called the *Present Value (PV)*.

$$\text{未來值} = \text{現值} \times (1 + \text{息率})$$

Note that \$10,000 = \$9,523.81 × (1.05).

1-76

6

3

Present Value現值

- In the one-period case, the formula for PV can be written as:
- 在一個時期的情況下,公式為現值 (PV) 可以寫為:

$$PV = \frac{C_1}{1+r}$$

Where C_1 is cash flow at date 1, and

r is the appropriate interest rate.

凡 C_1 是 現金流量 (時間一年),
 r 是 適當的利率。

1-77

7

Net Present Value淨現值

- The Net Present Value (NPV) of an investment is the present value of the expected cash flows, less the cost of the investment.
- 一個投資的淨價值,是目前的預期現金流量減去成本的投資。
- Suppose an investment that promises to pay \$10,000 in one year is offered for sale for \$9,500. Your interest rate is 5%. Should you buy?

假如有投資成本\$9,500, 承諾在一年時間收益\$10,000, 息率是5%。 你應否購買?

1-78

8

4

Net Present Value

$$NPV = -\$9,500 + \frac{\$10,000}{1.05}$$

$$NPV = -\$9,500 + \$9,523.81$$

$$NPV = \$23.81$$

The present value of the cash inflow is greater than the cost. In other words, the Net Present Value is positive, so the investment should be purchased. 在目前的價值的現金流入大於成本的。換言之,淨現值是正數值,所以是應購買的投資。

1-79

9

2 The Multiperiod Case

多期間的個案

- The general formula for the future value of an investment over many periods can be written as:

$$FV = C_0 \times (1 + r)^T$$

Where

C_0 is cash flow at date 0 是 現金流量,(時間零),

r is the appropriate interest rate 適當的利率,
and

T is the number of periods over which the cash is invested 是投資時間.

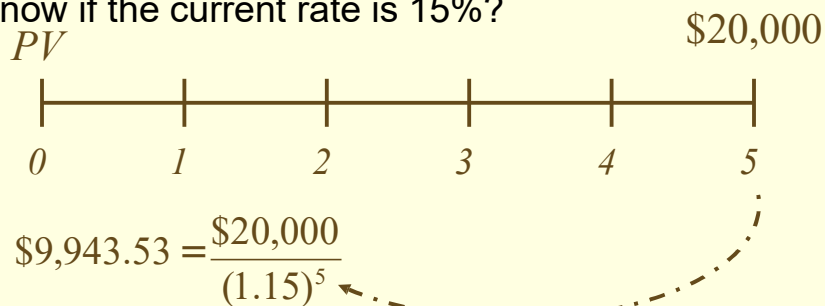
1-81

10

5

3.現值 Present Value and Discounting(compounding複利計算)

- 如果當前利率為15%，投資者今天需要預留多少資金，才能在五年後擁有\$20,000？
- How much would an investor have to set aside today in order to have \$20,000 five years from now if the current rate is 15%?



1-85

11

什麼利率是足夠?What Rate Is Enough?

假設當您的孩子在12年後上大學時，大學教育的總費用將是\$50,000。您今天有\$5,000可以投資。您需要獲得多少投資利率才能支付您孩子的教育費用？

Assume the total cost of a college education will be \$50,000 when your child enters college in 12 years. You have \$5,000 to invest today. What rate of interest must you earn on your investment to cover the cost of your child's education?

About 21.15%.

$$FV = C_0 \times (1+r)^T$$

$$\$50,000 = \$5,000 \times (1+r)^{12}$$

$$(1+r)^{12} = \frac{\$50,000}{\$5,000} = 10$$

$$(1+r) = 10^{1/12}$$

$$r = 10^{1/12} - 1 = 1.2115 - 1 = .2115$$

1-87

12

多時間的現金流動Multiple Cash Flows

- 考慮一項投資，在一年後能收回來\$200,且現金流量每年增加\$200，直到第4年。如果利率是12%，這筆現金流的現值是多少？
- 如投資\$1,500(成本),你是否應投資？
- Consider an investment that pays \$200 one year from now, with cash flows increasing by \$200 per year through year 4. If the interest rate is 12%, what is the present value of this stream of cash flows?
- If the issuer offers this investment for \$1,500, should you purchase it?

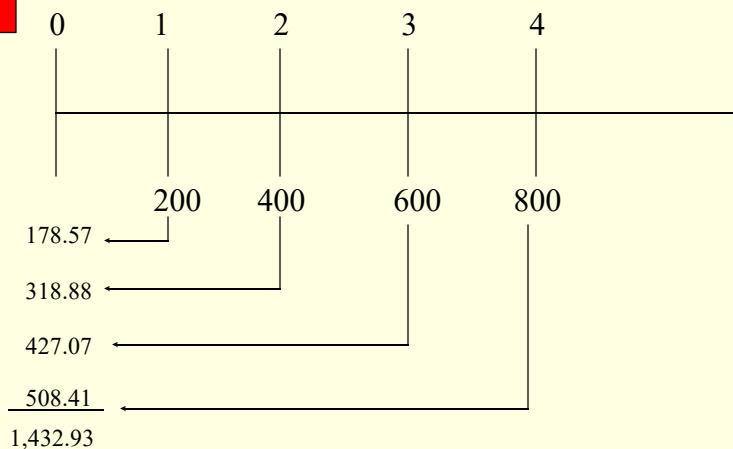
計算淨現值NPV (+ or -) ?

1-89

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多時間的現金流動Multiple Cash Flows

Worth
1500 ?



現值<成本→不應投資 (Present Value < Cost → Do Not Purchase)

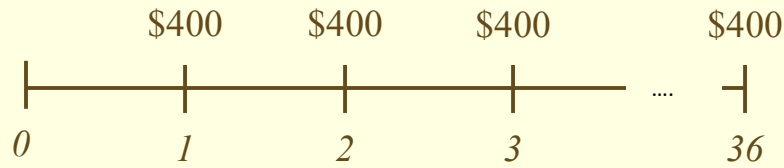
1-90

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Example

如果你能夠負擔得起每月付款\$400, 有多少可以負擔得起如果年利率是7%的36個月貸款? 什麼是現值如通過這種現金流動?

If you can afford a \$400 monthly car payment, how much car can you afford if interest rates are 7% on 36-month loans?



$$PV = \frac{\$400}{.07/12} \left[1 - \frac{1}{(1 + .07/12)^{36}} \right] = \$12,954.59$$

1-103

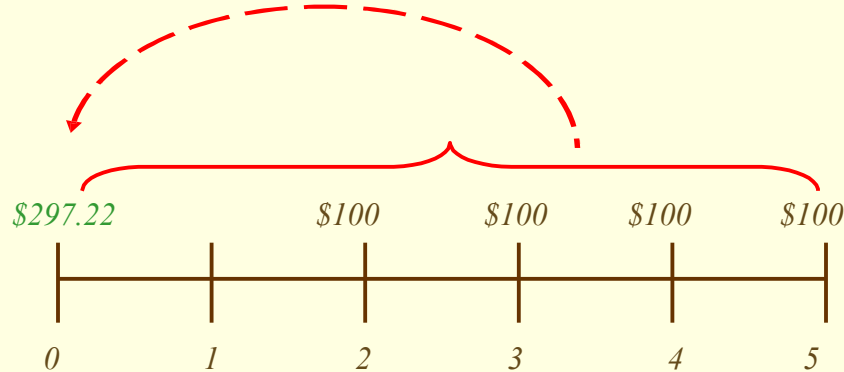
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4.簡化 Simplifications

什麼是現值, 第二年的一個四年的年金\$100每年收入, 今天的折扣率是9%?

What is the present value of a four-year annuity of \$100 per year that makes its first cash inflow two years from today if the discount rate is 9%?

$$PV_0 = \sum_{t=2}^5 \frac{\$100}{(1.09)^t} = \frac{\$100}{(1.09)^2} + \frac{\$100}{(1.09)^3} + \frac{\$100}{(1.09)^4} + \frac{\$100}{(1.09)^5} = \$297.22$$



2-104

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5. Loan Amortization

- Amortized Loans require repayment of principal over time, in addition to required interest.
- 攤銷償還貸款要求隨時間償還本金，此外還需支付必要的利息。

1-108

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Amortized Loan with Fixed Principal Payment

- Consider a \$50,000, 10 year loan at 8% interest. The loan agreement requires the firm to pay \$5,000 in principal payment each year plus interest for that year.
- 考慮一筆50,000美元的10年期貸款，利率為8%。貸款協議要求公司每年償還5,000美元的本金，外加當年的利息。
- Click on the Excel icon to see the amortization table



1-111

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Year	Beginning Balance	Interest Payment	Principal Payment	Total Payment	Ending Balance
1	50,000	4,000	5,000	9,000	45,000
2	45,000	3,600	5,000	8,600	40,000
3	40,000	3,200	5,000	8,200	35,000
4	35,000	2,800	5,000	7,800	30,000
5	30,000	2,400	5,000	7,400	25,000
6	25,000	2,000	5,000	7,000	20,000
7	20,000	1,600	5,000	6,600	15,000
8	15,000	1,200	5,000	6,200	10,000
9	10,000	800	5,000	5,800	5,000
10	5,000	400	5,000	5,400	0

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Amortized Loan with Fixed Payment

- Each payment covers the interest expense plus reduces principal
- Consider a 4 year loan with annual payments. The interest rate is 8% ,and the principal amount is \$5,000.
 - 4 Number of years
 - 8 % interest
 - 5,000 PV
 - PMT = -1,509.60
- Click on the Excel icon to see the amortization table



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Year	Beginning Balance	Total Payment	Interest Paid	Principal Paid	Ending Balance
1	5,000.00	1,509.60	400.00	1,109.60	3,890.40
2	3,890.40	1,509.60	311.23	1,198.37	2,692.03
3	2,692.03	1,509.60	215.36	1,294.24	1,397.79
4	1,397.79	1,509.60	111.82	1,397.78	0.01
Totals		6,038.40	1,038.41	4,999.99	

Note: The ending balance of .01 is due to rounding. The last payment would actually be 1,509.61.

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6 What Is a Firm Worth?

公司價值是值什麼？

- Conceptually, a firm should be **worth the present value of the firm's cash flows**.
在概念上,公司價值是公司的現值的現金流動
- The tricky part is determining the **size, timing, and risk** of those cash flows.
是公司的現金流動確定規模大小、時間、和風險

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Module 7

Net Present Value and Other Investment Rules 目前淨價值及其他投資規則

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Key Concepts and Skills

- Be able to compute payback and discounted payback and understand their shortcomings
能夠計算折現回收和理解其缺點
- Be able to compute the internal rate of return and profitability index, understanding the strengths and weaknesses of both approaches
能夠計算內部回報率和盈利能力指數,了解兩種方法的優點和弱點,
- Be able to compute net present value and understand why it is the best decision criterion
能夠計算淨現值和理解為什麼它是最好的決定標準

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Chapter Outline

- 1 Why Use Net Present Value 為什麼使用淨現值?
- 2 The Payback Period Method 歸還期
- 3 The Internal Rate of Return (IRR) 內部回報率
- 4 Problems with the IRR Approach
- 5 The Profitability Index 盈利能力指數
- 6 The Practice of Capital Budgeting 資本預算

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Pizza Wagon

Introduction

- Olive is made redundant at the age of 57.
- She cannot draw her pension until she is 60.
- She decides to run her own business for 3 years.
- This will be a catering service.
- She intends to sell pizzas for £4 each.
- Ingredients will cost £1 each.
- She intends to buy a parcel van (£ 19,500) and convert it to a mobile kitchen and sales facility.
- It will be called 'The Pizza Wagon'.
- Her business plan income and expenditure are shown in the next slide.

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披薩美食車

介紹

Olive 57歲時被公司裁員。他要直到60歲先可以提取養老金。所以，他決定在這三年間創辦自己的企業，經營一家餐飲服務。他打算以每個披薩四英鎊的價格出售。而食材就是**Pizza**，每個售價一英鎊。他打算購買披薩車，花費**19,500**英鎊，並將其改造成一個移動廚房和銷售設施，稱為“披薩美食車”。他的業務計劃收入和支出如下：

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Pizza Wagon (Continued)				
	<i>Year 1</i>	<i>Year 2</i>	<i>Year 3</i>	<i>3-Year Period</i>
No. of pizzas sold	<u>15,000</u>	<u>20,000</u>	<u>25,000</u>	<u>60,000</u>
	£	£	£	£
Sales revenue	60,000	80,000	100,000	240,000
Cost of ingredients	<u>15,000</u>	<u>20,000</u>	<u>25,000</u>	<u>60,000</u>
Gross profit	<u>45,000</u>	<u>60,000</u>	<u>75,000</u>	<u>180,000</u>
Van depreciation	6,500	6,500	6,500	19,500 (straight-line)
Van running costs	9,000	9,000	9,000	27,000
Site fees	11,000	14,000	19,000	44,000
Advertising	5,000	4,000	4,000	13,000
Administration	<u>3,500</u>	<u>3,500</u>	<u>3,500</u>	<u>10,500</u>
Total overheads	<u>35,000</u>	<u>37,000</u>	<u>42,000</u>	<u>114,000</u>
Net profit	<u>10,000</u>	<u>23,000</u>	<u>33,000</u>	<u>66,000</u>

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Details of Van Payment

- Olive has no business track record.
- She is unable to buy van on credit terms.
- She needs to use £19,500 cash to pay for the van at the start of year 1.

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Owner's Point of View

- Olive is satisfied with budget projections.
- £10,000 is much less than her current income of about £15,000. But if she is careful, she believes she can survive her first year by living simply.
- Years 2 and 3 look considerably better compared to her current income.

However, Olive is shocked at end of year 1 that she is running short of working capital!!! Can you see why?

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Conversion of Profit to Cash Flow

	Year 1	Year 2	Year 3	3-Year Period
	£	£	£	£
NET PROFIT	10,000	23,000	33,000	66,000
ADJUSTMENT*	-13,000	+6,500	+6,500	-
NET CASH FLOW	-3,000	+29,500	+39,500	+66,000

*Calculation of adjustment

Depreciation	6,500	6,500	6,500	19,500
Less: van payment	<u>19,500</u>	<u>-</u>	<u>-</u>	<u>19,500</u>
	<u>-13,000</u>	<u>+6,500</u>	<u>+6,500</u>	<u>-</u>

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What is Capital Investment Appraisal (CIA)?

Capital Investment Appraisal is about deciding, which fixed assets to acquire or which long-term projects to invest in, e.g. factories, machinery, offices, etc.

Typically,

- large amounts of money are involved over long periods of time.
- the cost of reversing a CIA decision is very high.

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Capital Investment Appraisal 投資評估(CIA)

ARR = Accounting Rate of Return 會計收益率 Profit-based
基於利潤

PBP = Payback Period 回報期

Discounted PBP = Discounted Payback Period 貼現回收期
Cash-flow based
基於現金流

NPV = Net Present Value 淨現值

IRR = Internal Rate of Return 內部回報率

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會計收益率

Accounting Rate of Return

This method expresses the expected average annual profits as a percentage of the initial investment.

$$ARR = \frac{\text{average annual profit}}{\text{initial investment}} \times 100$$

Companies using ARR may have a predetermined threshold percentage below which projects will not be accepted.

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1. Accounting Rate of Return

平均收益率

- Depreciation may be calculated several ways
折舊可以多種方式計算
- Income may vary from year to year 收入可能因年而異
- Time value of money is ignored 金錢的時間值被忽略



So why would I ever want to use this method anyway?

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Accounting Rate of Return (ARR)

會計收益率

直線法折舊的計算公式為：直線法折舊 = (資產成本 - 預計殘值) ÷ 資產的預計使用壽命。其中：資產成本是資產的初始購買或建造成本以及任何相關的資本支出。

Net Cash Flows*	
Year 1	\$ 4,100
Year 2	4,100
Year 3	4,100
Year 4	4,100
Year 5	4,100
Year 6	4,100
Year 7	4,100
Year 8	4,100

重新考慮FasTek正在考慮的\$16,000投資金額。年度稅後淨收入為\$2,100。計算會計收益率。

$$\text{Accounting rate of return} = \frac{\text{平均淨利潤值}}{\text{投資金額}} = \frac{\$2,100}{\$16,000} = 13.13\%$$

Cash flow	\$ 4,100
Depreciation	2,000
Net Profit	<u>\$ 2,100</u>

$$\text{Depreciation} = (\$16,000 - 0) \div 8 \text{ years}$$

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Limitations of ARR

- Profits are based on subjective opinions.
- Profits depend on depreciation method used.
- Profits can be manipulated by creative accounting.

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1 Why Use Net Present Value?

- Accepting positive NPV projects benefits shareholders.
 - ./ NPV uses cash flows
 - ./ NPV uses all the cash flows of the project
 - ./ NPV discounts the cash flows properly
- 接受正淨現值項目-股東利益.
 - ./ 淨現值現金流
 - ./ 項目淨現值的現金流
 - ./ 淨現值適當地折扣現金流

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The Net Present Value (NPV) Rule

- Net Present Value淨現值(NPV) =
Total PV of future CF's+ Initial Investment
現值的未來現金流量+初次成本
- Estimating NPV:
 1. Estimate future cash flows估計未來現金流量: how much? and when?
 2. Estimate discount rate估計折扣率
 3. Estimate initial costs估計初次成本
- Minimum Acceptance Criteria最低接受標準:
 - Accept if NPV > 0 接受如果淨現值 > 0
- Ranking Criteria選擇標準:
 - Choose the highest NPV選擇最高淨現值

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Calculating NPV with Spreadsheets

- Spreadsheets are an excellent way to compute NPVs, especially when you have to compute the cash flows as well.
- Using the NPV function: 
 - The first component is the required return entered as a decimal.
 - The second component is the range of cash flows *beginning with year 1*.
 - Add the initial investment after computing the NPV.

- 電子表格係計算NPV是絕佳方式，尤其是当你仲必須計算現金流時。使用NPV函數：頭炮組件係以小數形式輸入嘅必需返回值。第二個組成部分係由第1年開始嘅現金流範圍。計算NPV後加上初始投資。

1-121

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Calculating 淨現值 NPV with Spreadsheets

Year	0	1	2	3
Cash Flows	-165000	63120	70800	91080
Required Return	0.12			
NPV	\$12,627.41			

$$\text{NPV (12\%, Y1, Y2, Y3) + (165000)} \\ = 12,627.41$$

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淨現值(NPV)

淨現值分析用的時間價值的錢,未來的現金流入和現金流出,管理可以評估一個項目的好處和成本在同一點的時間。

- ❶ 打折後價格的淨現金流量在所需投資回報率。
- ❷ 打折後的現金流減去投資的首期款額

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淨現值(NPV)與平等現金流量

FasTek 正在考慮購買一個初步成本\$16,000, 有一個8年壽命和零殘值, 這種承諾每年淨現金流量的 \$4,100. FasTek 12 percent 每年的投資回報率.

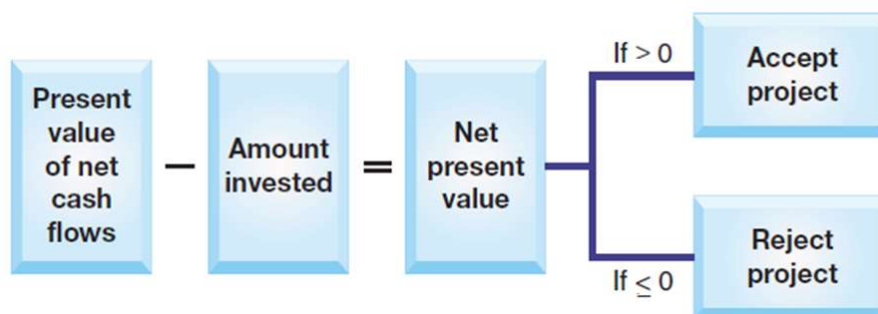
	Net Cash Flows*	Present Value of 1 at 12%†	Present Value of Net Cash Flows
Year 1	\$ 4,100	0.8929	\$ 3,661
Year 2	4,100	0.7972	3,269
Year 3	4,100	0.7118	2,918
Year 4	4,100	0.6355	2,606
Year 5	4,100	0.5674	2,326
Year 6	4,100	0.5066	2,077
Year 7	4,100	0.4523	1,854
Year 8	4,100	0.4039	1,656
Totals	\$32,800		\$20,367
Amount invested			(16,000)
Net present value			\$ 4,367

* Cash flows occur at the end of each year.

† Present value of 1 factors are taken from Table B.1 in Appendix B.

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淨現值決定規則



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淨現值與現金流動不均衡

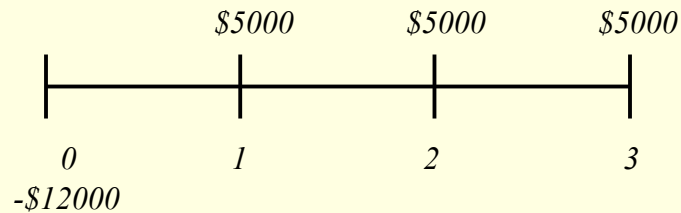
	Net Cash Flows			Present Value of I at 10%	Present Value of Net Cash Flows		
	A	B	C		A	B	C
Year 1	\$ 5,000	\$ 8,000	\$ 1,000	0.9091	\$ 4,546	\$ 7,273	\$ 909
Year 2	5,000	5,000	5,000	0.8264	4,132	4,132	4,132
Year 3	5,000	2,000	9,000	0.7513	3,757	1,503	6,762
Totals	\$15,000	\$15,000	\$15,000		12,435	12,908	11,803
Amount invested					(12,000)	(12,000)	(12,000)
Net present value ...					\$ 435	\$ 908	\$ (197)

雖然所有項目需要同樣的投資,在同一總淨現金流,項目B有一個更高淨現值,因為一個較大的淨現金流量

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NPV: Example

Consider the following project:



The rate of NPV for this project is 該項目嘅NPV 率為10%

$$NPV = -12000 + \frac{5000}{(1+R)} + \frac{5000}{(1+R)^2} + \frac{5000}{(1+R)^3}$$

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2. 償還時期方法

- 如何項目,以“返回”其最初的投資呢?
- 償還期=在幾年收回最初成本
- 最低接受標準:管理層設置

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2 Payback Period 回報期

**The payback period of an investment
is the time expected to recover
the initial investment amount.**
投資的資源回收期是預期恢復的時間
初始投資金額

**Managers prefer investing in projects
with shorter payback periods.**
管理者喜歡投資專案
回報週期較短



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償還時期方法

- 缺點:
 - 不理時間值
 - 不理償還期後的現金流動
 - 帶有偏見的長期項目
 - 需要一個任意接受標準
 - 償還期:接受一個項目的基礎上標準可能不是正的淨現值
- 優勢:
 - 容易理解
 - 偏袒流動資金

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回收期法 (payback period method)

- 回收期法 (payback period method)
回收期 (payback period), 是指（以現金）投入的資本性支出，全數回收預計所需的等候時間。
- 回收期是常被用作評估計劃投資的一種快速卻粗糙的方法。

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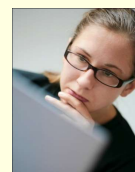
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回收期法 (payback period method)

這是一個投資償還期預期的時間是以收回最初的投資額。

$$\text{償還期} = \frac{\text{投資成本}}{\text{年度淨現金流量}}$$

管理人員選擇投資項目的回報期較短。



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Computing Payback Period 計算償還期
with Even Cash Flows 一樣的現金流量

FasTek is considering buying a new machine that will be used in its manufacturing operations. The machine costs \$16,000 and is expected to produce **annual net cash flows** of \$4,100. The machine is expected to have an 8-year useful life with no salvage value. 有一個8年壽命和零殘值, 這種承諾每年淨現金流量的 \$4,100.

Calculate the payback period.

$$\text{Payback Period} = \frac{\text{Cost of Investment (投資成本)}}{\text{Annual Net Cash Flow}}$$

回報時期 年度淨現金流量

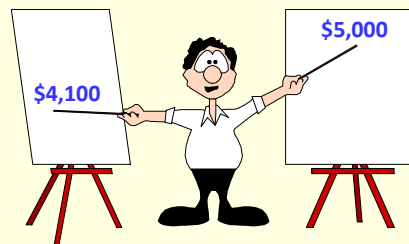
$$\text{Payback period} = \frac{\$16,000}{\$4,100} = 3.9 \text{ years}$$



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計算償還期,不平均的現金流量

在上個例子,我們認為,在每年的一樣現金流量。
現在,讓我們來看看一個例子。在每年不相同的現金流量。



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計算回收期法 / 償還期,不平均的現金流量

FasTek wants to install a machine that costs \$16,000 and has an 8-year useful life with zero salvage value. Annual net cash flows are: 希望安裝一台成本為16,000美元且使用壽命為8年且零殘值的機器。年度現金流量淨額為:

Payback is about 4.2 years.

Year	Annual Net Cash Flows	Cumulative Net Cash Flows
0	\$ (16,000)	\$ (16,000)
1	3,000	(13,000)
2	4,000	(9,000)
3	4,000	(5,000)
4	4,000	(1,000)
5	5,000	4,000
6	3,000	7,000
7	2,000	9,000
8	2,000	11,000

4.2

54

Using the Payback Period 償還期/回收期

The payback period has two major shortcomings 兩大缺點:

- It ignores the **time value of money** 時間值; and
- It ignores cash flows after the payback period 回收期後現金流動.

Consider the following example where both projects cost \$5,000 and have five-year useful lives: 請考慮以下示例,其中兩個專案的成本為5,000 美元,並且有五年的使用壽命:

Year	Project One Net Cash Inflows	Project Two Net Cash Inflows
1	\$ 2,000	\$ 1,000
2	2,000	1,000
3	2,000	1,000
4	2,000	1,000
5	2,000	1,000,000

Would you invest in Project One over Project Two just because it has a shorter payback period?

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Decision Rule 決策規則

If the discounted payback period is less than the target period, accept the project. Otherwise reject.

如果折現的投資回收期少於目標期，則接受項目。否則拒絕。

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貼現回收期法 (Discount Payback Method)

貼現回收期法 (Discount Payback Method)

- 跟回收期法差不多，只是要找出每年現金流入的現值 (Present Value)
- 再將其一年一年加起來，直到等於或超過投資金額為止。

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Example

An initial investment of \$2,324,000 is expected to generate \$600,000 per year for 6 years. Calculate the discounted payback period of the investment if the discount rate is 11%.

初投資2,324,000元,預計將在六年內,每年產生60萬元。如果貼現率為11%，計算投資的折現投資回收期。

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Solution

Step 1: Prepare a table to calculate discounted cash flow of each period by multiplying the actual cash flows by present value factor. Create a cumulative discounted cash flow column.

折現投資現金流				
Year n	Cash Flow CF	Present Value Factor $PV\$1 = 1/(1+i)^n$	Discounted Cash Flow $CF \times PV\$1$	Cumulative Discounted Cash Flow
0	\$-2,324,000	1.0000	\$ -2,324,000	\$ -2,324,000
1	600,000	0.9009	540,541	- 1,783,459
2	600,000	0.8116	486,973	- 1,296,486
3	600,000	0.7312	438,715	- 857,771
4	600,000	0.6587	395,239	- 462,533
5	600,000	0.5935	356,071	- 106,462
6	600,000	0.5346	320,785	214,323

Step 2: Discounted Payback Period = $5 + |-106,462| / 320,785 \approx 5.32$ years

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Advantages and Disadvantages 優點和缺點

Advantage: Discounted payback period is more reliable than simple payback period since it accounts for time value of money. It is interesting to note that if a project has negative net present value it won't pay back the initial investment.

優點：折現回收期比簡單回報期更可靠，因為它佔了貨幣的時間價值。有意思的是，如果一個項目的淨現值為負，則不會支付初始投資。

Disadvantage: It ignores the cash inflows from project after the payback period. 缺點：它在投資回收期後忽略項目的現金流入。

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3 The Internal Rate of Return

內部收益率

- IRR: the discount rate that sets NPV to zero
是指項目投資實際可望達到的報酬率，即能使投資項目的淨現值等於零時的折現率
- Minimum Acceptance Criteria:
 - Accept if the IRR exceeds the required return
- Ranking Criteria:
 - Select alternative with the highest IRR選擇的最高回報率

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內部報酬率法 (internal rate of return – IRR)

- IRR 避免了在使用NPV法時，必須在計算前先選擇要求報酬率，因為選擇適當的報酬率是一件困難的事。
 - 這個報酬率就被稱為內部報酬率，或現金流量貼現 (discounted cash flow, DCF) 報酬率。(IRR法有時也被稱為 DCF 法。)
- IRR : 使 NPV 等於 0 的報酬率

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Internal Rate of Return (IRR) 內部回報率

The interest rate that makes . . .

$$\text{①} \quad \begin{array}{ccc} \text{Present} & & \text{Present} \\ \text{value of} & = & \text{value of} \\ \text{cash inflows} & & \text{cash outflows} \\ \text{現值現金流入} & & \text{現值現金流出} \end{array}$$

② The net present value equals zero 淨現值等於零.

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Internal Rate of Return (IRR) 內部回報率

- 缺點:
 - IRRs內部收益率可不存在, 或有可會多種利率規則
 - Problems with mutually exclusive investments 與投資不能重疊
- 優勢:
 - 很容易理解和溝通

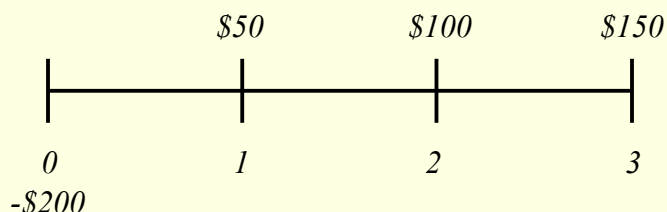
1-127

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IRR內部回報率: Example

Consider the following project:



The internal rate of return for this project is 該專案的內部回報率為 19.44%

$$NPV = 0 = -200 + \frac{\$50}{(1+IRR)} + \frac{\$100}{(1+IRR)^2} + \frac{\$150}{(1+IRR)^3}$$

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4 The Profitability Index (PI)

盈利能力指數

$$PI = \frac{\text{Total PV of Future Cash Flows 總現值未來現金流量}}{\text{Initial Investment 初始投資}}$$

- Minimum Acceptance Criteria 最低接受標準:
Accept 接受 if $PI > 1$
- Ranking Criteria 排名標準:
 - Select alternative with highest 選擇一個最最高 PI

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The Profitability Index

- Disadvantages:
 - Problems with mutually exclusive investments
 - 與投資不能重疊
- Advantages:
 - 可有助當現有的投資有限資金
 - 很容易理解和溝通
 - 正確的決定當評價獨立項目

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5 The Practice of Capital Budgeting

- Varies by industry:
 - Some firms use payback, others use accounting rate of return
 - (ARR平均收益率=每年平均收益/初始投資額).

最常使用的技術大企業IRR or NPV.

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Example of Investment Rules

Compute the **IRR, NPV, PI**, and payback period for the following two projects. Assume the required return is 10%. 計算以下兩個專案的IRR、淨現值、PI和回收期。假設所需的回報為 10%

	Net Cash Flows			Present Value of I at 10%	Present Value of Net Cash Flows		
	A	B	C		A	B	C
Year 1	\$ 5,000	\$ 8,000	\$ 1,000	0.9091	\$ 4,546	\$ 7,273	\$ 909
Year 2	5,000	5,000	5,000	0.8264	4,132	4,132	4,132
Year 3	5,000	2,000	9,000	0.7513	3,757	1,503	6,762
Totals	\$15,000	\$15,000	\$15,000		12,435	12,908	11,803
Amount invested					(12,000)	(12,000)	(12,000)
Net present value ...					\$ 435	\$ 908	\$ (197)

1-139

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資本預算的方法比較

- 87% 的公司用貼現方法的結果作為主要的定量指標淨
- 這些公司中約有 2/3 用 IRR 作為主要方法，1/3用 NPV
- 大多數公司用上一種以上的方法

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Firm Cost of Capital 公司資本成本

- Assume firm finances its activities by both debt (B) and equity (S)
- Cost of debt is R_B and cost of equity is R_S
- Firm cost of capital is calculated by weighting these two costs appropriately
- 假設公司透過債務 (B) 和股權 (S) 為其活動提供資金
- 債務成本為 R_B ，權益成本為 R_S
- 公司資本成本是透過適當加權這兩個成本來計算的

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The Weighted Average Cost of Capital 加權平均資本成本

- The Weighted Average Cost of Capital is given by:
- 加權平均資本成本由以下公式給出：

$$R_{WACC} = \frac{\text{Equity 股權}}{\text{Equity} + \text{Debt}} \times R_{\text{Equity}} + \frac{\text{Debt 債務}}{\text{Equity} + \text{Debt}} \times R_{\text{Debt}} \times (1 - T_C)$$

$$R_{WACC} = \frac{S}{S + B} \times R_S + \frac{B}{S + B} \times R_B \times (1 - T_C)$$

- ▶ Because interest expense is tax-deductible, we multiply the last term by $(1 - T_C)$.
- ▶ 因為利息費用可以免稅，所以我們將最後一項乘以 $(1 - T_C)$

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WACC –example加權平均資本成本 –範例

- ABC company finances its activities by both debt and equity. ABC 公司透過債務和股權為其活動提供資金。
- Cost of equity capital is 7.74%. 股本成本為7.74%
- The yield on the company's debt is 5%, and the firm has a 21% marginal tax rate. 該公司債務收益率為 5%，邊際稅率為 21%。
- The debt to value ratio is 32%. 負債價值比率為32%。

$$R_{WACC} = \frac{S}{S+B} \times R_S + \frac{B}{S+B} \times R_B \times (1 - T_C)$$

$$= 0.68 \times 7.74\% + 0.32 \times 5\% \times (1 - 0.21)$$

$$= 6.53\%$$

6.53% is ABC's cost of capital (i.e., WACC). It should be used to discount any project where one believes that the project's risk is equal to the risk of the firm as a whole and the project has the same leverage as the firm as a whole. 6.53%.

是ABC的資本成本（即WACC）。它應該用於折現任何項目，只要人們認為該項目的風險等於整個公司的風險，並且該項目具有與整個公司相同的槓桿率。

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WACC – Question加權平均資本成本 – 問題

- Amazon company finances its activities by both debt and equity.
亞馬遜公司透過債務和股權為其活動提供資金。
- Cost of equity capital is 8%股本成本為8%
- The yield on the company's debt is 7%, and the firm has a 24% marginal tax rate. The debt to value ratio is 40%
該公司債務收益率為 7%，邊際稅率為 24%。債務價值比率為40%

Cost of Equity and Capital (US)股權和資本成本（美國）

https://pages.stern.nyu.edu/~adamodar/New_Home_Page/datafile/wacc.html

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WACC – Answer加權平均資本成本 – 答案

- Cost of equity capital is 10%股本成本為10%
- The yield on the company's debt is 7%, and the firm has a 24% marginal tax rate. The debt to value ratio is 40%.該公司債務收益率為 7%，邊際稅率為 24%。債務價值比率為40%
- The debt to value ratio is 40%.債務價值比率為40%。

$$\begin{aligned}
 R_{WACC} &= \frac{S}{S+B} \times R_S + \frac{B}{S+B} \times R_B \times (1 - T_C) \\
 &= 0.6 \times 10\% + 0.4 \times 7\% \times (1 - 0.24) \\
 &= 6\% + 2.128\% \\
 &= 8.128\%.
 \end{aligned}$$

So retry with, debt to value ratio of 60%. What is the WACC?
因此，重試，負債價值比率為 60%。什麼是 WACC？

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Summary – Discounted Cash Flow

- 淨現值
 - 市場價值和成本之間不同
 - Accept the project if the NPV is positive (如果淨現值為正,則接受)
 - 沒有任何嚴重問題
 - 決定選擇標準
- 內部收益率
 - Discount rate that makes NPV = 0
 - Take the project if the IRR is greater than the required return
 - Same decision as NPV with conventional cash flows與傳統的值現金流
 - IRR is unreliable with non-conventional cash flows非傳統現金流(-, +, +, -, + or alternatively +, -, -, +, -)
- 盈利能力指數
 - Benefit-cost ratio效益成本比
 - Take investment投資 if PI > 1
 - May be used to rank projects in the presence of capital rationing
 - 可用於在資本配給的情況下對項目進行排名

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Summary – Payback Criteria

- 償還期/回收期
 - Length of time until initial investment is recovered 回復初始投資的時間長度
 - Take the project if it pays back in some specified period 未能考慮到時間的金錢價值, 有一個任意截止時間

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Qualitative Factors in Decisions 決策中的定性因素

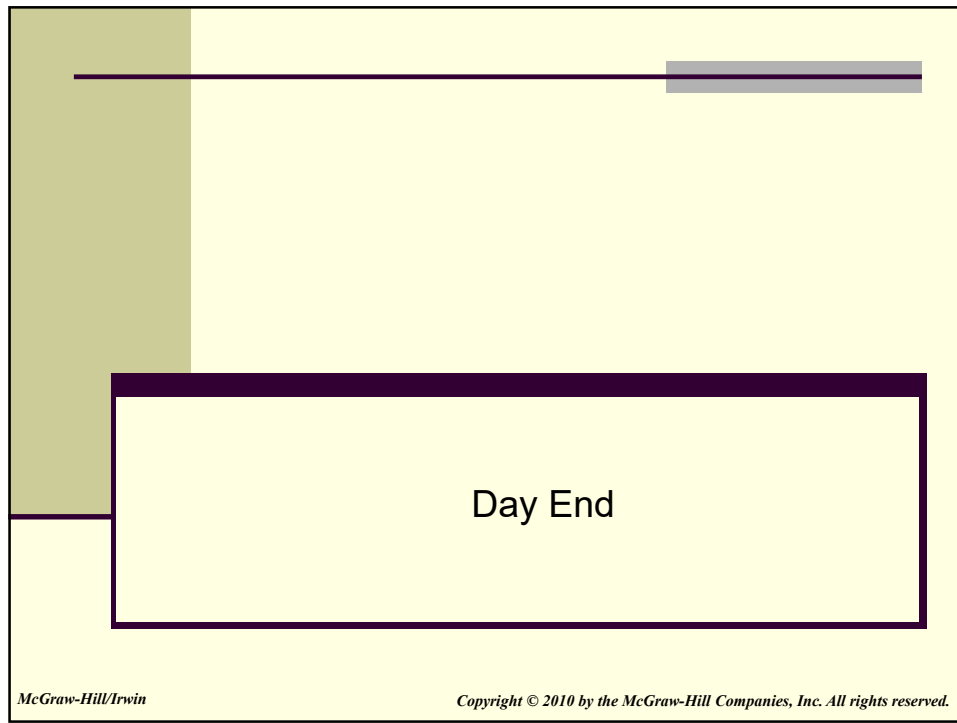
Qualitative factors are involved in most all managerial decisions. For example:

定性因素涉及大多數管理決策。例如：

- **Quality** 品質
- **Delivery schedule** 交貨時程表
- **Supplier reputation** 供應商聲譽
- **Employee morale** 員工士氣
- **Customer opinions** 客戶意見

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What is Corporate Governance?

1

1

Corporate Governance

Why is it important?

- Promote the efficient use of limited resources
- Promote the trust of investors
- Good corporate governance has a positive link to economic development and good corporate performance
- Funds will flow to entities which are seen to have internationally accepted standards of corporate governance

2

2

Corporate Governance

- Investors are not willing to invest in countries/companies that have scandal situations, poorly managed and lacking sufficient protection for investors' rights
- Securities and company law protection may help, but not enough
- Corporate Governance adds the legal framework
- Corporate Governance also plays an important role in maintaining corporate integrity and managing the risk of corporate fraud, fighting against management misconduct and corruption

3

3

Principles of Corporate Governance

1. **Ensuring the basis for an effective corporate governance framework**
2. **The rights of shareholders and key ownership functions**
3. **The reasonable treatment of shareholders**
4. **The role of stakeholders in corporate governance**
5. **Disclosure and transparency**
6. **The responsibilities of the board**
 - The corporate governance framework should ensure the strategic guidance of the company, the **effective** monitoring of management by the board, and the board's **responsibility** to the company and the shareholders.

4

4

Board of Directors

- Full record of board/committee minutes, and available for inspection
- **Independent** non-executive directors should be present at board meetings to discuss matter involving conflict of interest

5

5

Chairman and CEO

- Segregation of the management of the board and the day-to-day management of the corporate's business (Separation of Chairman and CEO)
- Balance of power at board level to avoid concentration of power in a single individual (Division of responsibilities between Chairman and CEO clearly laid down in writing)

6

6

Sources of Finance



7

7

Business Growth



8

8

Internal Sources of Finance and Growth



- **Finance growth** – growth generated through the development and expansion of the business itself. Can be achieved through:
- **Generating increasing sales** – increasing revenue to impact on overall profit levels
- **Use of retained profit** – used to reinvest in the business
- **Sale of assets** – reduces capacity?

9

9

External Sources of Business Growth

- Long Term
- Short Term

10

10

External Sources of Business Growth

- Long Term
 - Shares
 - Ordinary Shares
 - Preference Shares
 - Loans
 - Debentures
 - Bank loans (mortgage)

11

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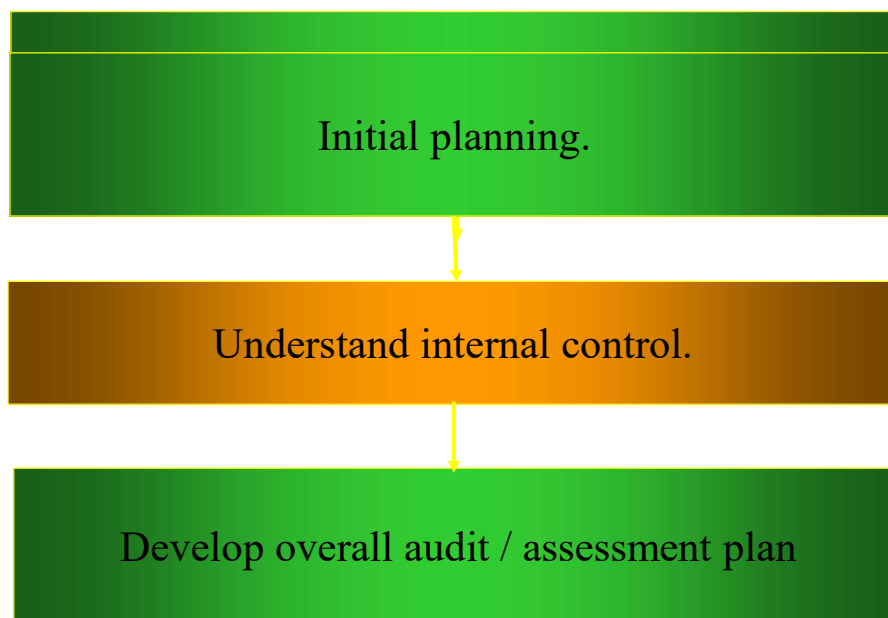
External Sources of Business Growth

- Short Term
 - Bank loans
 - Overdraft facilities
 - Trade credit

12

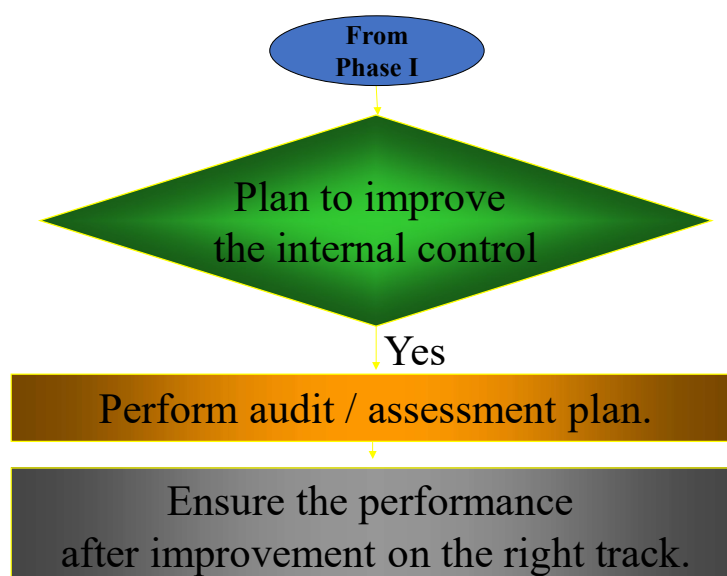
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Summary of the Audit / Assessment Process - Phase I (Planning)



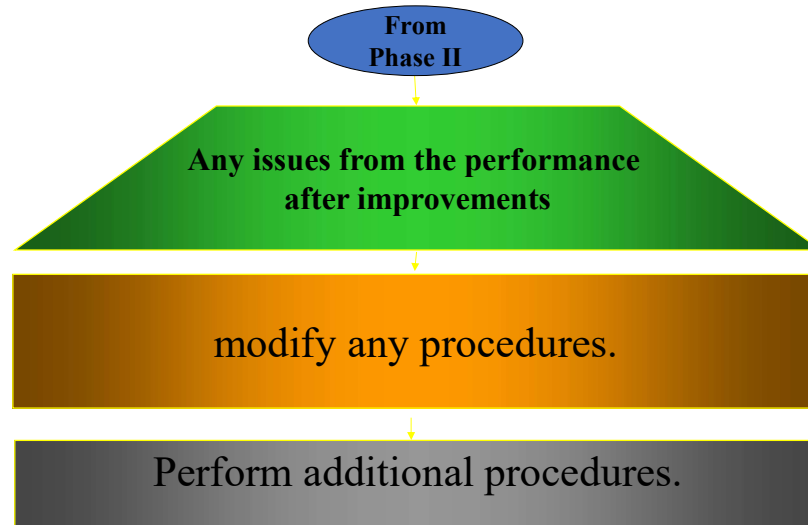
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Summary of the Audit / Assessment Process - Phase II (Begin the Work Done)



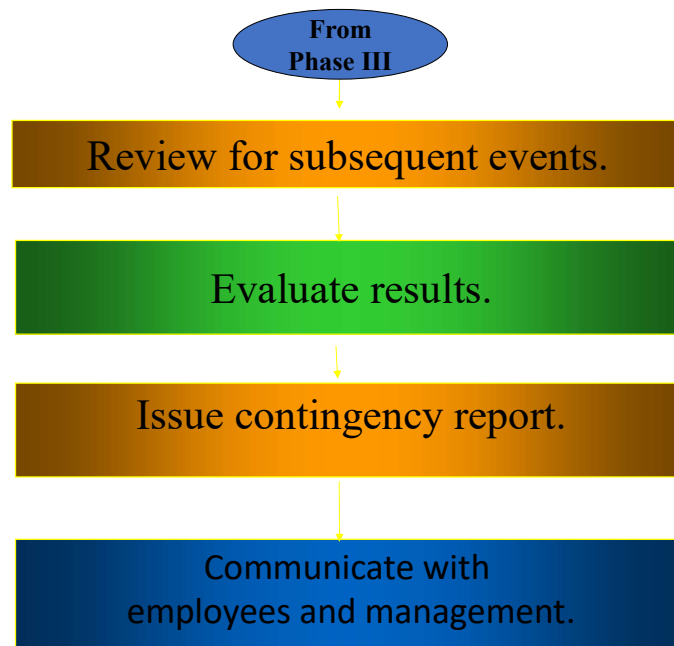
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Summary of the Audit / Assessment Process Phase III (End of the Work Done)



15

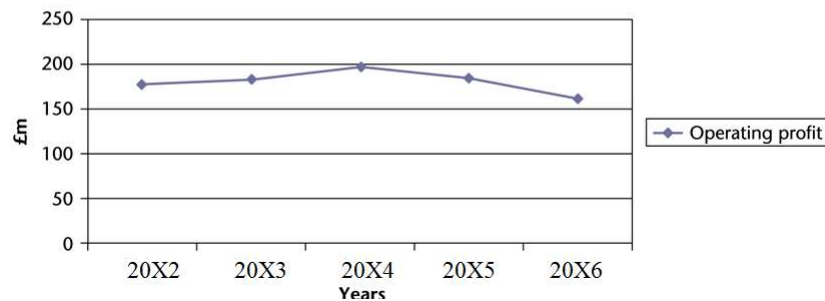
Summary of the Audit / Assessment Process Phase IV (Summary)



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Table and graph of Devah's operating profits showing changes from previous years

Year	20X2	20X3	20X4	20X5	20X6
Profit before tax (£m)	138	143	156	144	112
Add back interest (£m)	40	40	40	40	50
Operating profit/PBIT (£m)	178	183	196	184	162
Standardised profit (20X6 = 100)	110	113	121	114	100
Change on previous year (%)	n/a	2.7	7.1	(5.8)	(12.3)

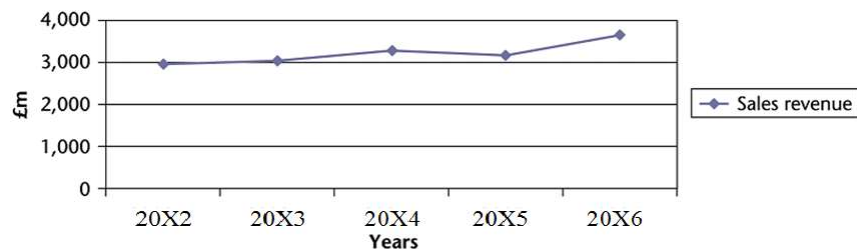


1

1

Table and graph of Devah's sales revenue showing changes from previous years

Year	20X2	20X3	20X4	20X5	20X6
Sales (£m)	2,945	3,017	3,291	3,136	3,646
Standardized sales (20X6 = 100)	81	83	90	86	100
Change on previous year (%)	n/a	2.5	8.4	(4.4)	16.3

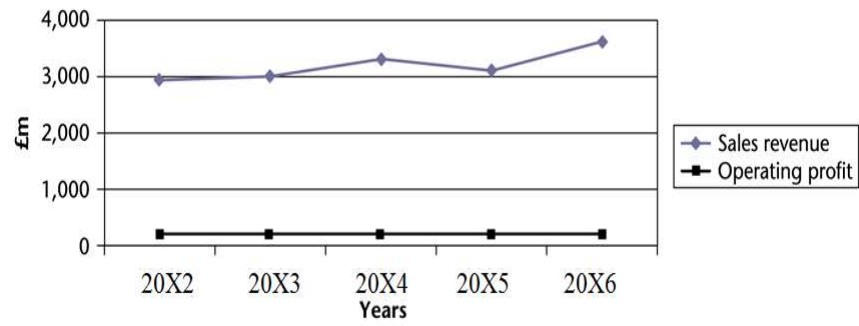


2

2

1

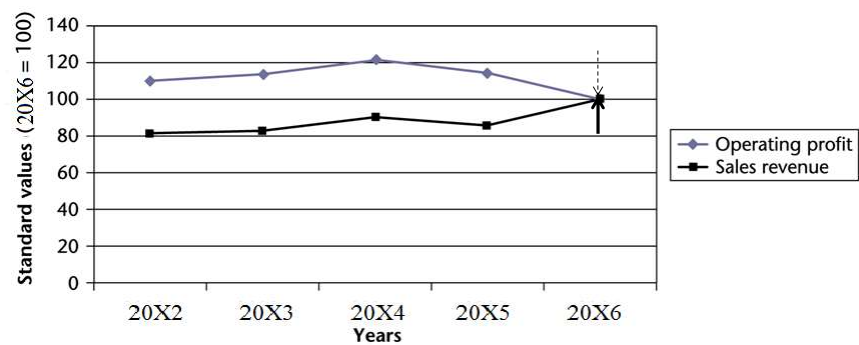
Devah's operating profit and sales revenue



3

3

Devah's operating profit and sales Revenue using standard values



4

4

Return on Capital Employed

- $\text{ROCE} = \frac{\text{operating profit}}{\text{total capital employed}}$
- $\text{ROCE} = \frac{\text{profit before interest and tax}}{\text{share capital} + \text{reserves} + \text{loan capital}}$

- *For Devah plc (20X5):*

$$\text{ROCE} = \frac{(144 + 40)}{600 + 224 + 400} = \frac{184}{1,224} = 15.0\%$$

5

5

1

Calculate the ROCE ratio for Devah plc for 20X6 and comment on your findings.

6

6

1: Answer

For Devah plc (20X6)

$$\begin{aligned}\text{ROCE} &= \frac{\text{profit before interest and tax}}{\text{share capital + reserves + loan capital}} \\ &= \frac{(112 + 50)}{700 + 238 + 500} = \frac{162}{1,438} = 11.27\%\end{aligned}$$

This shows that there has been a very sharp drop in the ROCE from **15.0% to 11.27%**, a fall of about one-quarter. It is imperative for management to find out why this has occurred and, if possible, to correct this trend as soon as possible.

7

7

Profit Margin

- **Profit margin** = $\frac{\text{operating profit (PBIT)}}{\text{sales revenue}}$

- *For Devah plc (20X5):*

$$\text{Profit margin} = \frac{184}{3,136} = 5.87\%$$

- This means that, on average, it makes £5.87 operating profit on every £100 of sales

8

8

2

**Calculate the profit margin for Devah plc for 20X6
and comment on your findings.**

9

9

2: Answer

For Devah plc (20X6)

$$\text{Profit margin} = \frac{162}{3,646} = 4.44\%$$

This shows that the profit margin has reduced by about a quarter, from 5.87% to 4.44%. This is a significant change and should be corrected if possible.

10

10

Asset Utilization

- This ratio indicates how efficiently the assets of the business are being used to generate sales.
- Asset utilization = $\frac{\text{sales revenue}}{\text{net total assets}}$
- Capital utilization = $\frac{\text{sales revenue}}{\text{Total capital employed}}$ Same as asset utilization
- *For Devah plc (20X5):*
Asset utilization = $\frac{\text{sales revenue}}{\text{net total assets}} = \frac{3,136}{1,224} = 2.56 \text{ times}$
- The managers are using the assets to create 2.6 times their asset value in sales revenue.

11

11

3

Calculate the Asset utilization ratio for Devah plc for 20X6 and comment on your findings.

12

12

3: Answer

For Devah plc (20X6)

$$\text{Asset utilization} = \frac{\text{sales revenue}}{\text{net total assets}} = \frac{3,646}{1,438} = 2.54 \text{ times}$$

This shows that there has been no significant change in the utilization of assets (20X5 = 2.56 times).

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Relationship Between the Three Ratios

$$\bullet \quad \frac{\text{operating profit}}{\text{total capital employed}} = \frac{\text{operating profit}}{\text{sales revenue}} \times \frac{\text{sales revenue}}{\text{total capital employed}}$$

$$\bullet \quad \frac{\text{operating profit}}{\text{total capital employed}} = \frac{\text{operating profit}}{\text{sales revenue}} \times \frac{\text{sales revenue}}{\text{net total assets}}$$

$$\bullet \quad \text{ROCE} = \text{profit margin} \times \text{asset utilization}$$

• *For Devah plc (20X5)*

$$15.03\% = 5.87\% \times 2.56 \text{ times}$$

14

14

4

Check that this relationship holds good for Devah plc for 20X6.

(You will probably need to use two decimal places to be sure the arithmetic is consistent.)

15

15

4: Answer

For Devah plc (20X6)

ROCE = profit margin × asset utilization

11.27% = 4.44% × 2.54 times

This confirms the accuracy of the calculations and it also shows that the drastic fall in ROCE is almost entirely due to the fall in the profit margin.

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16

Further Interpretation

- (A) high profit margin $\times$ low asset utilization = mid-range ROCE

$$20\% \times 0.8 \text{ times} = 16\%$$

- (B) low profit margin $\times$ high asset utilization = mid-range ROCE

$$2.5\% \times 6.0 \text{ times} = 15\%$$

- Example (A) could be a business with relatively few premium-priced sales at the top end of the quality market whereas example (B) could be a 'pile-them-high-sell-them-cheap' business. These are **two well-known business strategies**.

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Gross Margin and Cost Control

- Decrease in Profit Margin may be due to increased costs.
- But which costs.....direct or indirect?
- Gross profit margin shows whether the direct costs are under control.
- Gross margin = $\frac{\text{gross profit}}{\text{sales revenue}} = \frac{(\text{sales revenue} - \text{direct cost of sales})}{\text{sales revenue}}$
- If gross margin decreases, corrective action may be possible.

18

18

Gross Margin and Cost Control (Continued)

- If the gross margin is steady or improving, any decrease in profit margin will be due to an increase in overhead costs.

- Examine the ratio: $\frac{\text{overheads}}{\text{sales revenue}}$

(Note: total overheads should not include any interest costs.)

- For Devah plc (20X5):

$$\text{gross margin} = \frac{\text{gross profit}}{\text{sales revenue}} = \frac{1,068}{3,136} = 34.1\%$$

- $\frac{\text{overheads}}{\text{sales revenue}} = \frac{884}{3,136} = 28.2\%$

- Cost control is an important management task necessary to maintain and improve business performance.

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Question 2 shows the following profit margins:

20X5 = 5.87%, 20X6 = 4.44%.

Explain this decline in performance by calculating the gross margin and overheads/revenue ratios for Devah plc for 20X6.

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5: Answer

For Devah plc

Profit margin	=		<u>20X6</u> 4.44%	<u>20X5</u> 5.87%
			(calculated in previous slides)	
Gross margin	=	$\frac{1,164}{3,646}$	= 31.93%	34.06%
<u>overheads</u> sales revenue	=	$\frac{1,002}{3,646}$	= 27.48%	28.19%

This shows that the overheads are a smaller proportion of sales revenue in 20X6 than they were in 20X5 indicating that there has been an improvement in their control. However, the gross margin has declined from 34% to 32% indicating that there has been a disproportionate increase in the direct cost of sales. So management attention should be focused on direct costs rather than overheads.

21

21

Working Capital Ratios

- Working capital = Net current assets ↓
- Net Total Assets = Fixed assets (NBV) + Net current assets
= Total capital employed
- Reduction in working capital => Increase in ROCE
- Control of working capital can lead to improved performance.

22

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Relationship Between the Three Ratios

- $\frac{\text{operating profit}}{\text{total capital employed}} = \frac{\text{operating profit}}{\text{sales revenue}} \times \frac{\text{sales revenue}}{\text{total capital employed}}$
- $\frac{\text{operating profit}}{\text{total capital employed}} = \frac{\text{operating profit}}{\text{sales revenue}} \times \frac{\text{sales revenue}}{\text{net total assets}}$ ↓
- ROCE ↑ = profit margin × asset utilization ↑
-

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Stock Turnover Ratio

- Estimate of average amount of time period-end stock will be held.
- Stock turnover = $\frac{\text{year-end stock}}{\text{average daily cost of sales}}$
- Stock turnover = $\frac{\text{year-end stock}}{\text{annual cost of sales}/365}$
- Stock turnover = $\frac{\text{year-end stock} \times 365}{\text{annual cost of sales}}$
- *For Devah plc (20X5):*

$$\text{Stock turnover} = \frac{382}{2,068} \times 365 = 67 \text{ days}$$
- The shorter the better.

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Calculate the stock turnover ratio for Devah plc for 20X6 and comment on your findings.

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6: Answer

For Devah plc (20X6)

$$\text{Stock turnover} = \frac{530}{2,482} \times 365 = 78 \text{ days}$$

This shows that the management of stock has worsened over the year; stock days have increased from 67 to 78, a deterioration of 16%.

26

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Debtor Collection Period

- Only connected with credit sales (*cash sales not relevant*)
- Debtor collection period = $\frac{\text{year-end debtors}}{\text{average daily credit sales}}$
- Debtor collection period = $\frac{\text{year-end debtors}}{\text{annual credit sales}} \times 365$
- Estimate of how long it will take for year-end debtors to pay up.
- *For Devah plc (20X5):*
- Debtor collection period = $\frac{102}{3,136} \times 365 = 12 \text{ days}$
- **The shorter the better.**

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Calculate the debtor collection period for Devah plc for 20X6 and comment on your findings.

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7: Answer

For Devah plc (20X6)

$$\text{Debtor collection period} = \frac{156}{3,646} \times 365 = 16 \text{ days}$$

This shows that the management function of 'credit control' is being performed much less well than last year. Debtor days have increased by one-third, from 12 to 16.

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Creditor Payment Period

- Mirror image of debtor collection period
- Purchases on credit terms only (*cash purchases not relevant*)
- Creditor payment period* = $\frac{\text{year-end creditors}}{\text{average daily credit purchases}}$
- Creditor payment period = $\frac{\text{year-end creditors}}{\text{annual credit purchases}} \times 365$
- If purchases figure not known,
Purchases = cost of sales + closing stock – opening stock.

* Calculations in details.

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Creditor Payment Period (Continued)

- *For Devah plc (20X5):*
assume stock at the start of 20X5 had a value of £290 million.
- Purchases = cost of sales + closing stock – opening stock
- = 2,068 + 382 – 290 = 2,160
- Creditor payment period = $\frac{\text{year-end creditors}}{\text{average daily credit purchases}}$
- Creditor payment period = $\frac{242}{2,160} \times 365 = 41 \text{ days}$
- **The longer the better.**

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Calculate the creditor payment period for Devah plc for 20X6 and comment on your findings.

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8: Answer

For Devah plc (20X6)

$$\begin{aligned}\text{Purchases} &= \text{cost of sales} + \text{closing stock} - \text{opening stock} \\ &= 2,482 + 530 - 382 \\ &= 2,630\end{aligned}$$

$$\begin{aligned}\text{Creditor payment period} &= \frac{\text{year-end creditors}}{\text{average daily credit purchases}} \\ &= \frac{312}{2,630} \times 365 \\ &= 43 \text{ days}\end{aligned}$$

This shows a very slight improvement in creditor days, from 41 to 43.

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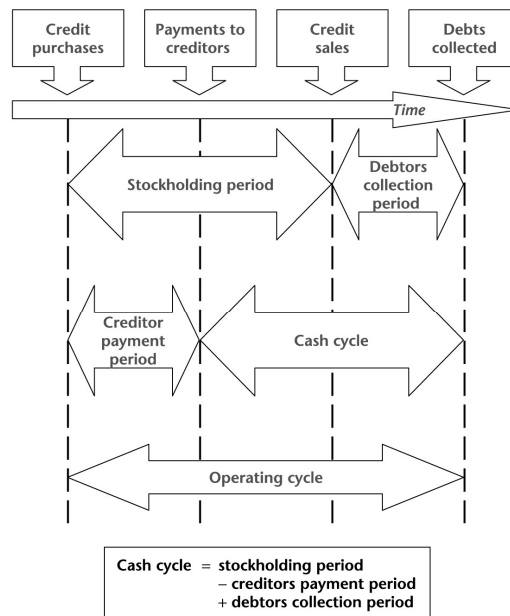
The Cash Cycle

- Cash cycle = (stock turnover – creditor payment period) + debtor collection period
- Term in brackets above = length of time money is tied up in stock
- *For Devah plc (20X5):*
$$\begin{aligned}&= (67 \text{ days} - 41 \text{ days}) + 12 \text{ days} \\ &= 26 \text{ days} + 12 \text{ days} = 38 \text{ days}\end{aligned}$$
- The shorter the better. The longer the cycle, the more cash is needed by the business.
- Cash is often a scarce resource and must be managed efficiently.
- Most common cause for businesses 'dying' is insufficient cash.

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The Operating and Cash Cycles



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Calculate the cash cycle for Devah plc for 20X6 and comment on your findings.

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9: Answer

For Devah plc (20X6)

Cash cycle = (stock turnover – creditor payment period) + debtor collection period

$$= (78 \text{ days} - 43 \text{ days}) + 16 \text{ days}$$

$$= 35 \text{ days} + 16 \text{ days}$$

$$= 51 \text{ days}$$

This shows that the cash cycle has increased by about one-third over the year, from 38 days to 51 days. **This significant deterioration indicates inefficient management of working capital.** It is important for this trend to be reversed as soon as possible.

37

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Liquidity Ratios

- Analysis of short-term assets and liabilities
- Adequate liquidity is essential for survival
$$\text{Current ratio} = \frac{\text{current assets}}{\text{current liabilities}}$$
- Usually expressed in the form 1.5:1.0
(i.e. £1.50 of current assets available to pay for every £1.00 of current liabilities)
- Liquid ratio = $\frac{\text{liquid assets}}{\text{current liabilities}} = \frac{\text{current assets} - \text{stock}}{\text{current liabilities}}$
- The liquid ratio (= acid test ratio) is a *sharper* measure of liquidity.

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Liquidity Ratios (Continued)

- No guarantee stock will be converted into sales.
- Sometimes, stockholding period similar to debtors collection period. So, stock can be 'liquid'.....e.g. grocery supermarkets.
- *For Devah plc (20X5):*
- $$\text{Current ratio} = \frac{\text{current assets}}{\text{current liabilities}} = \frac{514}{360} = 1.4:1.0$$
- $$\text{Liquid ratio} = \frac{\text{current assets} - \text{stock}}{\text{current liabilities}} = \frac{514 - 382}{360} = 0.4:1.0$$

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Calculate the current and liquid ratios for Devah plc for 20X6 and comment on them.

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10: Answer

For Devah plc (20X6)

$$\text{Current ratio} = \frac{\text{current assets}}{\text{current liabilities}} = \frac{686}{428} = 1.6:1.0$$

$$\text{Liquid ratio} = \frac{\text{current assets} - \text{stock}}{\text{current liabilities}} = \frac{686 - 530}{428} = 0.36:1.0$$

This shows that although the current ratio has improved slightly compared to last year, the liquid ratio has not changed.

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Gearing and Capital Structure

- Where has the money to run the business come from?
- Three basic sources: shareholders, lenders and retained profits.
- Shareholders own profits, so only 2 sources: owners and non-owners.
- Non-owners are sometimes referred to as 'third parties'.
- Gearing ratio examines relationship between these 2 sources of funds.

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42

Gearing and Capital Structure (Continued)

- Gearing = $\frac{\text{funds from third parties}}{\text{total funds}}$
- = $\frac{\text{funds from third parties}}{\text{shareholder funds} + \text{funds from third parties}}$
- = $\frac{\text{loan capital}}{(\text{shareholder capital} + \text{reserves}) + \text{loan capital}}$
- A ratio of 75% means that 75% of funds come from 'outside' and 25% from 'inside' the company.
- The higher the percentage, the higher the gearing.

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Gearing and Capital Structure (Continued)

- **Alternative ratio: Gearing** =
$$\frac{\text{funds from third parties}}{\text{shareholder funds}}$$
$$= \frac{\text{loan capital}}{\text{shareholder capital} + \text{reserves}}$$
- **Direct comparison of the amounts provided by the two sources.**
- **Ratio of 3.0 means that third parties provide £3 of funds for every £1 provided by shareholders.**
(Identical financial structure as in the 75% ratio shown on previous slide.)

44

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- *For Devah plc (20X5):*

- Gearing =
$$\frac{\text{loan capital}}{\text{shareholder capital} + \text{reserves} + \text{loan capital}}$$
$$= \frac{400}{600 + 224 + 400} = \frac{400}{1,224} = 32.7\%$$

- Using the same ratio, calculate the gearing ratio for Devah plc for 20X6 and comment on your answer.

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11: Answer

For Devah plc (20X6)

$$\begin{aligned}\text{Gearing} &= \frac{\text{loan capital}}{\text{shareholder capital} + \text{reserves} + \text{loan capital}} \\ &= \frac{500}{700 + 238 + 500} = \frac{500}{1,438} = 35\%\end{aligned}$$

This shows that there has been a slight increase (of two percentage points) in gearing compared to the previous year.

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46

Gearing and Capital Structure (Continued)

- Gearing transforms inputs into higher or lower outputs.
- If a business gets half of its £2 million total funds from shareholders and half from bank (£1 million debenture with interest at 10% a year):

shareholders Bank
- Business achieves a return of **15%** a year on total capital employed.

1m	1m
.15	.15
	-.10
	.05
- £1 million bank loan earns a return of £150,000 a year.
- £100,000 paid for interest to bank; other £50,000 to the shareholders.

.05
.20 (20%)
- Shareholders' £1 million capital earns £150,000 and they also get £50,000 return on the loan capital.
- Shareholders' total return is £200,000 on £1 million = 20% return.
- In effect, their investment is **geared up to 20%**.

47

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Gearing and Capital Structure (Continued)

- Alternatively:
 - Business gets half of its £2 million total funds from shareholders and half from bank (£1 million debenture with interest at 25% a year).
 - Business achieves a return of **15%** a year on total capital employed.
 - Business earns £300,000 return (15% × £2M).

shareholders Bank
 - **The bank receives £250,000 interest a year.**

1m	1m
.15	.15
	-.25
	-.10
 - Shareholders' £1 million capital earns only £50,000.
 - Shareholders' total return is £50,000 on £1 million = 5% return.

.10
.05 (5%)
 - In effect, their investment is **geared down to 5%**.

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Gearing and Capital Structure (Continued)

- Moderate gearing is seen as advantageous by shareholders but high gearing is seen as a risk.
- The higher the gearing – the greater the risk.
- But business was making positive operating profits.
- Unless debt was reduced, profit would be insufficient to pay interest.

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Interest Cover

- Interest cover = $\frac{\text{operating profit}}{\text{interest payable}} = \frac{\text{PBIT}}{\text{interest}}$
- Measures the number of times interest can be paid for by profits.
- Gives some idea of sensitivity/criticality of interest payments.
- Cover of 4 times much more comfortable than 1.5 times.

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For Devah plc (20X5):

$$\begin{aligned}\text{Interest cover} &= \frac{\text{PBIT}}{\text{Interest}} = \frac{\text{Profit before tax} + \text{Interest}}{\text{Interest}} \\ &= \frac{144 + 40}{40} = 4.6 \text{ times}\end{aligned}$$

Calculate the interest cover ratio for Devah plc for 20X6 and comment on your answer.

51

51

12: Answer

For Devah plc (20X6)

$$\text{Interest cover} = \frac{\text{Profit before tax} + \text{interest}}{\text{Interest}} = \frac{112 + 50}{50} = 3.24 \text{ times}$$

Although this does not represent any imminent danger, the interest cover has reduced by about a quarter to 3.24 times (from 4.6 times). Further borrowing will worsen this position.

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Limitations of Ratio Analysis

- How accurate is the picture painted by ratio analysis?
- Effect of accounting conventions: e.g. if inflation is high, historic cost convention may distort amount of capital employed.
- Also, capital employed figure depends on choice of depreciation method and other accounting policies.
- Past performance is not always a good indicator of future performance due to rate of change in business environment.
- Ratios quantify *what* has happened, not *why*.
- Enron's accounts were certified correct by their auditors!
- *Ratios are only as good as the data they use.*

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《表格六》七匹狼服装公司财务比率公式及代码表

财务结构

1	固定资产占长期资金比	Fixed Asset to LTL/Equity Ratio	=	$\frac{\text{固定资产}}{\text{长期负债} + \text{所有者权益}}$	$\frac{\text{FA}}{\text{LTL} + \text{Equity}}$	FA	代码	名称
2	流动负债对资产净值比	Current Liabilities to Net Asset Ratio	=	$\frac{\text{流动负债}}{\text{资产净值}}$	$\frac{\text{CL}}{\text{NA} = (\text{TA} - \text{CL} - \text{LTL})}$	CL	AR	应收帐
3	流动负债对存货比	Current Liabilities to Stock Ratio	=	$\frac{\text{流动负债}}{\text{存货}}$	$\frac{\text{CL}}{\text{Stock}}$	CL	CA	流动资产
偿债能力及变现能力		Short Term Solvency and Liquidity Measure					CE	占用资本
	短债	Short term Solvency					Cash	现金
4	流动比率	Current Ratio	=	$\frac{\text{流动资产}}{\text{流动负债}}$	$\frac{\text{CA}}{\text{CL}}$		CL	流动负债
5	速动比率	Quick Ratio (Acid-test Ratio)	=	$\frac{\text{速动资产}}{\text{流动负债}}$	$\frac{\text{CA} - \text{Stock}}{\text{CL}}$	流动资产－存货	COS	销售成本
6	存货信赖	Stock Credit Index	=	$\frac{\text{流动负债} - \text{速动资产}}{\text{存货}}$	$\frac{\text{CL} - (\text{CA} - \text{stock})}{\text{stock}}$		EAT	税后收益
7	现金比率	Cash Ratio	=	$\frac{\text{现金}}{\text{流动负债}}$	$\frac{\text{Cash}}{\text{CL}}$		EBT	税前收益
	长债	Long Term Liquidity Measure					EBIT	息税前收益
8	资产负债比率	Total Debt Ratios	=	$\frac{\text{总负债}}{\text{总资产}}$	$\frac{\text{TL}}{\text{TA}}$		Equity	所有者权益
9	产权比率	LT Debt / Equity Ratio	=	$\frac{\text{长期负债}}{\text{所有者权益}}$	$\frac{\text{LTL}}{\text{Equity}}$		FA	固定资产
10	槓桿比率	Long Term Debt Ratio	=	$\frac{\text{长期负债}}{\text{长期负债} + \text{所有者权益}}$	$\frac{\text{LTL}}{\text{LTL} + \text{Equity}}$		GP	毛利
11	有形资产负债率	Total Debt / Fixed Asset Ratio	=	$\frac{\text{总负债}}{\text{有形资产}}$	$\frac{\text{TL}}{\text{FA}}$	总负债	I	贷款利息
12	利息保障倍数	Time Interest earned ratio	=	$\frac{\text{息税前收益}}{\text{贷款利息}}$	$\frac{\text{EBIT}}{\text{I}}$	固定资产	IC	投入资本
营运能力		Net Asset Turnover					LTL	长期负债
13	净值周转率	Working Capital Turnover	=	$\frac{\text{销售}}{\text{净值}}$	$\frac{\text{Sales}}{\text{NA} = (\text{TA} - \text{CL} - \text{LTL})}$		NA	资产净值
14	营运资金周转率	Inventory Turn	=	$\frac{\text{销售}}{\text{营运资金}}$	$\frac{\text{Sales}}{\text{WC}}$		NP	净利
15	存货周转率	Day's Sales in Inventory	=	$\frac{\text{销货成本}}{\text{存货}}$	$\frac{\text{COS}}{\text{Stock}}$	流动资产－流动负债	ROA	资产回报率
16	存货周转日	Receivables Turnover	=	$\frac{365}{\text{存货周转率}}$	$\frac{365}{\text{Inventory Turn}}$		ROBA	经营资产息税前回报率
17	应收帐周转率	DSO - Days Sales Receivable (outstanding)	=	$\frac{\text{销售}}{\text{应收帐}}$	$\frac{\text{Sales}}{\text{AR}}$		ROCE	占用资本回报率
18	应收帐周转日	Payable Turnover	=	$\frac{365}{\text{应收帐周转率}}$	$\frac{365}{\text{Receivable Turnover}}$		ROE	权益回报率
19	应付帐周转率	Days of Payables Outstanding	=	$\frac{\text{销售成本}}{\text{AP}}$	$\frac{\text{COS}}{\text{AP}}$		ROI	投资回报率
20	应付帐周转日	Fixed Asset Turnover	=	$\frac{365}{\text{应付帐周转率}}$	$\frac{365}{\text{Payable Turnover}}$		ROIC	投入资本回报率
21	固定资产周转率	Current Asset Turnover	=	$\frac{\text{销售}}{\text{固定资产}}$	$\frac{\text{Sales}}{\text{FZ}}$		RONA	资产净值回报率
22	流动资产周转率	Total Asset Turnover	=	$\frac{\text{销售}}{\text{流动资产}}$	$\frac{\text{Sales}}{\text{CA}}$		ROTA	总资产回报率
23	总资产周转率	Stock to WC Ratio	=	$\frac{\text{总资产}}{\text{存货}}$	$\frac{\text{TA}}{\text{Stock}}$		STL	短期负债
24	存货对营运资金比		=	$\frac{\text{营运资金}}{\text{营运资金}}$	$\frac{\text{WC}}{\text{WC}}$		Sales	销售
							Stock	存货
							TA	总资产
							TL	总负债
							WC	营运资金
							WCR	营运资金需求

Remark for 3: Indicates reliance on the available inventory for payment of short-term debt.

获利能力

25	毛利率	Gross Profit Margin	=	$\frac{\text{毛利}}{\text{销售}}$	=	$\frac{\text{GP}}{\text{Sales}}$	$\frac{\text{销售}-\text{销售成本}}{\text{销售}}$
26	净利率	Net Profit Margin (ROS)	=	$\frac{\text{净利}}{\text{销售}}$	=	$\frac{\text{NP}}{\text{Sales}}$	销售回报率(return on Sales, ROS)
27	淨值收益率	RONA	=	$\frac{\text{資產淨值 (NA)}}{\text{淨利}}$	=	$\frac{\text{TA} - \text{CL} - \text{LTL}}{\text{NP}}$	$\frac{\text{淨利}}{\text{总资产}-\text{流动负债}-\text{长期负债}}$
28	营运资金收益率	ROWC	=	$\frac{\text{淨利}}{\text{营运资金}}$	=	$\frac{\text{NP}}{\text{WC}}$	$\frac{\text{淨利}}{\text{流动资产}-\text{流动负债}}$
29	总资产收益率 (税后)	ROA	=	$\frac{\text{淨利}}{\text{总资产}}$	=	$\frac{\text{NP}}{\text{TA}}$	资产回报率 (Return on Asset, ROA) = Return on Investment, ROI
	又称为“杜邦等式 (Dupont Formula)”		=		=		销售利润率 x 总资产周转率
						$\frac{\text{EAT}}{\text{SALES}} \times \frac{\text{SALES}}{\text{TA}}$	
30	总资产回报率 (息税前)	ROTA	=	$\frac{\text{EBIT}}{\text{TA}}$	=		Return on Total Assets, ROTA
31	经营资产息税前回报率	ROBA	=	$\frac{\text{EBIT}-\text{利息收入}}{\text{投入资本}-\text{现金}}$	=	$\frac{\text{EBIT} - \text{Interest gain/loss}}{\text{Invested Capital} - \text{Cash}}$	Return on Business Assets, ROBA
32	投入资本回报率	ROIC	=	$\frac{\text{EBIT}}{\text{投入资本}}$	=	$\frac{\text{EBIT}}{\text{Invested Capital}}$	Return on Invested Capital, ROIC
							营业利润率x资本周转率 (Capital Turnover)
							或资产净值周转率 (Net Asset Turnover)
						$\frac{\text{EBIT}}{\text{SALES}} \times \frac{\text{SALES}}{\text{IC}}$	
							资产净回报率 (Return on Net Asset, RONA)
							占用资本回报率 (Return on Capital Employed, ROCE)
							Return on Equity, ROE (After Tax)
33	权益回报率 (税后)	ROE (After Tax)	=	$\frac{\text{EAT}}{\text{所有者权益}}$	=	$\frac{\text{EAT}}{\text{Equity}}$	
				[杜邦比率 (Dupont Ratio)] =			
						$\frac{\text{EAT}}{\text{SALES}} \times \frac{\text{SALES}}{\text{TA}} \times \frac{\text{TA}}{\text{Equity}}$	
							销售利润率 x 总资产周转率 x 权益
						$\frac{\text{ROA} \times \text{权益乘数}}{\text{SALES}} = \frac{\text{ROA} \times 1 / (1 - \text{资产负债比率})}{\text{SALES}} \times \frac{\text{EBT}}{\text{EBIT}} \times \frac{\text{IC}}{\text{Equity}} \times \frac{\text{EAT}}{\text{EBT}}$	
							营业利润率 x 资本周转率 x 借贷成本比率 x 财务结构比率 x 税收效应
						$\frac{\text{ROIC}}{\text{税前营业获利能力、方针}} \times \frac{\text{财务杠杆乘数}}{(\text{Financial Leverage Multiplier})} = (1 - \text{税率})$	
							权益回报率 (税前) ROE (Before Tax)
增长能力							
34	留存收益率	Retain Earning Ratio	=	$\frac{\text{留存收益}}{\text{EAT}}$	=	$\frac{\text{Retain Earning}}{\text{EAT}}$	
35	自我维持增长率	Self-Sustainable Growth Rate	=	$\frac{\text{留存收益}}{\text{所有者权益}}$	=	$\frac{\text{Earning Earning}}{\text{Equity}}$	Self-sustainable Growth Rate, SGR=衡量公司增长力的指標 (不靠向外借款)
						$\frac{\text{EAT}}{\text{所有者权益}} \times \frac{\text{留存收益}}{\text{EAT}} = \text{ROE} = \text{留存收益率}$	
						$\frac{\text{营业利润率} \times \text{资本周转率} \times \text{财务杠杆乘数} \times \text{留存收益率} \times \text{税收效应}}{\text{反映公司营业方针} \quad \text{反映公司筹资政策} = (1 - \text{税率})}$	
36	市值和股份回报	Market Value / Earning Measure		$\frac{\text{淨利}}{\text{发行股份数量}}$		$\frac{\text{NP}}{\text{Total issued common shares}}$	
37	市价一盈余比率	PE Ratio		$\frac{\text{每股价}}{\text{每股盈余}}$		$\frac{\text{Share Price}}{\text{EPS}}$	

Executive Summary

The study will be Hong Kong listed company Parkson Retail Group Limited (3368) Financial Resources Management. This will be divided into six parts, 1) introduced the basic situation public Division such as business scope, corporate structure and market environment; 2) by the calculation Financial Ratios to analyze the firm's operating table, and the main competitors and a comparison 3) on which the Company internal controls and risk management; 4) assessment program this year the newly-opened the benefits Jinan shops and whether it is worthwhile investment, 5) List of funds collected and analyzed the pros and cons methods; 6) to provide operational efficiency audit programs to enable companies operating efficiency achieve the desired goal.

The first chapter is on Parkson Retail Group Limited's background and its business conditions, and introduce 3 types of companies with Golden Eagle Retail Group Limited (3308), the Intime Retail (Group) Company Limited (1833) and Springland International Holdings Limited (1700) as the comparison and analysis counterparts.

Chapter 2 through the various financial ratio, from different dimension analysis Parkson Retail Group Limited while in the financial structure and debt-servicing capacity through performed better than the other listed companies and insolvency index tests, but its operating capacity, profitability and growth capacity has been a recession behind counterparts and water. Although the investors' point of view its shares still able to give dividend rate of return stability, but Parkson Retail Group Limited necessary improvement programs to keep its operations.

Chapter 3 mentioned Parkson Retail Group Limited's corporate governance issues: the study shows that they must be at its core team, internal control, trading position transparency and credit risk management in for a change, to the multi overall operating performance and improve the operational capability and competitiveness.

Chapter 4 is assessed this year Jinan shop item the effectiveness and investment value. Calculated through cash flow, net present value, return more than the rate of investment returns and found that new projects on Parkson Retail Group Limited's business and financial position better financial benefits, it is proposed public Division project development and utilize its internal resources to pay for their liquidity needs.

The chapter 5 is to study to the Jinan shop has invested funds the feasibility financing analysis and to make the enterprises financial situation of the best recommendation. Analyzed by 5 different Financing Program, the reports recommendations Parkson Retail Group Limited adopt the bank 5-year loan program for Jinan shop the RMB378 million for funding.

Chapter 6 of Parkson Retail Group Limited for this year's operational efficiency audit planning, the proposed management needed in the concession counters sales ratio, other operating costs with revenue turnover ratio and operational cost-effectiveness that three areas are going to be audited.

In the final conclusion, we recommend that Parkson Retail Group Limited should grasp the financial structure still be preferable to peer level of lease machine, take decision action from the reform its corporate governance, and enhance its operational efficiency the corporate profitability and growth rates to go back on track, and try to eliminate the risk to face the crisis.

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1. Introduction

1.1 Company Background

Parkson Retail Group Limited ("Parkson") is The Lion Group, Malaysia in China's retail business department, The Lion Group's actual control are well-known local Chinese entrepreneurs Cheng Heng Jem. Parkson in 1994, China's retail market presence market, the Beijing opened the first homestores, was the first running a fashion in China which is department store chain enterprises in China, and now has become China's largest, still Department store, with covering China 30 major cities of the most extensive distribution network (E-Finet, 2008).

In November 2005, the Lion group to mainland China's Parkson distribution in Hong Kong Stock Exchange Listing Success (Stock code: 3368). Parkson first IPO through issuing 165.6 million shares, which 110.4 million shares of the new shares, 90 percent to the Placing, the remaining 10 percent in Hong Kong Public Offer. For each share 9.8 Hong Kong Dollar Listed Price guidelines points, the highest fund-raising 1,623million Hong Kong Dollar. Retail investors partly offer of the 44.7 times over-subscribed, the International Offering Shares as over-subscribed. Issued after the deduction and related costs, Parkson finally proceeded fund-raising net of 1,034 million Hong Kong Dollar. Their mainland retail business the total market value of 54,100 million Hong Kong dollar (the initial 55,200 million shares). IPO completed, Parkson's direct major shareholders holding shares PRG 70 per cent, public shareholding 30 per cent (QQ Finance, 2005).

Upto Year 2011 as 16 May, Parkson's stock price at 11.78 Hong Kong dollar, authorised share capital of 7,500 million, issued share capital of 2,810,490,250 shares. The market value of approximately 33,100 million Hong Kong dollar (Yahoo Hong Kong financial network, 2011). The growth of market value in Year 2011 compare to Year 2005 is five times.

1.2 Operating Business Overview (products and services and the sales market)

Parkson's business model is divided into two, the first is chartered counters mode, the company of specific retail area counters for licensing operating (mainly the brand clothing), the licensing franchise operations need to be the sales percentage (known as point deduction rate) to give department Stores, as commission, and the need to pay for the salary of sales. The second model is the direct sales, department stores procurement of goods in department store sales to consumers, such goods to Home Supplies and fresh foods. Finally, the company is also let some retail area to third parties are operating, but this part of the proportion are rarely, rental income accounted for only 2010 turnover of the 4.4 percent (Parkson, 2011).

Parkson currently in China 30 major urban management 47 branches, of which 40 are self-shop, and the remaining 7 home is a management shops, (The company is not real ownership of the substore and receive only an annual management fees) (see Appendix 1). Self-store retail sale area of 1,250,000 square meters, together with the remaining management store retail sale area 219,000 square meters, total retail area of about 1,470,000 square meters (see Table 2) (Parkson, 2011).

The company to take each department store of standards readjust commodity distribution traveling, brand portfolio and business space to better for the operation in the cities in high-end goal consumer services. Parkson provides a series of international brands fashion and lifestyle commodities, such goods can be divided into four categories, namely "fashion apparel and clothing" and "cosmetics and accessories" and "home supplies and electrical" and "food and fresh". The special for a youth and trendy fashion of communities (Parkson, 2011).

1.3 Today's Business Environment

Chinese retail are in high-speed growth, because income per capita enhances consumption rose to power, economic development from export to domestic demand. Chinese society 2010 total retail sales last year RMB 1.55 billion compare to last year the growth rate at 18.4 percent and higher than 10.3 percent of the economic growth in consumer goods in the type, especially in the luxury products fastest-growing, such as the gold and silver jewelry growth 46 percent, furniture growth 37.2 percent, electrical growth 27.7 percent. Parkson sales of major sales of four major types of goods precisely comply with the trend (China Statistical Information Network, 2011).

China Retail is a high dispersion and market competition, and engaged in the retail operations which can be divided into department store, supermarket chain group and clothing brands specialized stores, home appliances store, health care stores and general small shop 6 major categories. Parkson 2010 retail sales in RMB13,300 million for only national retail 0.09 percent of the market share. And in 2010, China Chain 100 strong" a survey in which Parkson total ranked 28; and in major chain in department stores operations ranked 8 (see Table 3) (eFuture, 2011).

1.4 Company Structure

Parkson offering document (2005) disclosed corporate structure apart from the Board, and management, and the main 8 divisions composition : procurement, design/Engineering, advertising and promotion, operation, management and administration, information technology, human resources, accounting and finance. In 2005 company employees of the 5,161; the 2010 increase at the end to 6,705.

1.5 Research comparison company information

This study is used of three comparison of Golden Eagle Retail Group Limited (3308), the Intime Retail (Group) Company Limited (1833) and Springland International Holdings Limited (1700). The above 3 businesses have the same nature of business with Parkson, and the size of the enterprise and market share are very close to each other (see to the following table). Therefore, we can from the above 4 companies the financial management of the equally comparative analysis.

Company Name (Stock number)	Parkson (3368)	Golden Eagle (3308)	Intime (1833)	Springland (1700)
Business Nature	Department Store, Shopping Mall and Supermarket			
Market value*1 (HKD)	33,720 million	39,480 million	23,900 million	17,380 million
PE*1	28.83	34.86	27.23	33.24
Market area	In China 30 major cities	Jiangsu, Anhui, Shaanxi	Zhejiang, Shaanxi, Hubei 3 province and Beijing	Yangtze River Delta
Number of Stores*2	40	19	30	30

Note1: Stock market closing date on 18 May 2011 (Source: Yahoo)

Note2: Enterprise 2010's annual report for the self-shop in terms of the number (Source: the enterprise 2010 Annual Report)

2. Parkson's financial analysis

In this we through Parkson's financial reports analysis, of its financial structure, the repayment and realized capacity, operating capacity, profitable capacity, growth capacity and market value and shares returns for six areas with industrial average and three Industry Companies for comparison studies; on data as a result of the findings and risk assessment, and references for the financial statements (Table 4 - Balance Sheet/ Income Statement and Schedule 5-financial ratio analysis table) (Anthony, 2010).

2.1 Listed companies of bankruptcy index Z-Score analysis

Z-Score mainly used to examine bankruptcy rate, when Z-Score greater value, insolvency of the less likely. Financial Ratios more sound. The Altman (1968), the when $Z < 1.8$, are located in bankruptcy; when $1.8 \leq Z < 2.99$, are located in gray area; when $Z \geq 2.99$ is located at the Security Zone. Four companies the Z-Score values are as follows:

(Company Name)	Parkson				Golden Eagle	Intime	Springland
(RMB in million)(Yr)	2007	2008	2009	2010	2010		
NET CURRENT ASSETS	2,175.9	1,874.0	480.9	1,281.6	-1,009.1	-474.9	21.8
Total Assets	8,989.5	9,834.1	11,074.1	12,591.3	7,979.3	12,289.5	6,710.9
Retained earnings	2,731.1	3,388.5	3,581.1	4,172.9	3,482.7	5,310.5	3,764.6
EBIT	1,270.2	1,457.9	1,541.8	1,682.2	1,633.9	1,150.9	663.9
Stock value(HKD)*1	18.79	8.58	13.52	11.96	19.1	11.48	6.25
RMB/HKD ex rate*1	1.074	1.128	1.139	1.182	1.182		
Number of Stock (Million shares)	557.2	2,797	2,807	2,810	1,945	1,913	2,500
Total Liabilities	6,121.4	6,306.8	7,082.0	8,002.2	4,299.1	6,978.8	2,924.7
Sales	2,727.0	3,137.4	3,461.3	3,819.4	2,450.4	2,288.8	2,990.0

Note 1 : Dec 31 closing value by dividend and stock split adjustment

Zscore : $Z = 1.2A + 1.4B + 3.3C + 0.6D + 0.999E$;

A = Working Capital/Total Assets ; B = Retained Earnings/Total Assets ; C = EBIT / Total Assets ;

D = [(Stock value x Total number of stocks)/RMB&HKD ex rate]/Total Liabilities; E = Sales/Total Assets

(Company Name)	Parkson				Golden Eagle	Intime	Springland
(RMB in million)(Yr)	2007	2008	2009	2010	2010		
A	0.24	0.19	0.04	0.10	(0.13)	(0.04)	0.00
B	0.30	0.34	0.32	0.33	0.44	0.43	0.56
C	0.14	0.15	0.14	0.13	0.20	0.09	0.10
D	7.71	3.39	4.71	3.55	7.31	2.66	4.52
E	0.30	0.32	0.31	0.30	0.31	0.19	0.45
Z Score	2.44	3.55	4.10	3.46	5.83	2.65	4.27

Listed companies insolvency index analysis: Parkson 4 years of Z-Score are safe-area and to demonstrate its financially sound.

2.2 Financial structure

Table no Table Title

(Company Name)	Parkson				Parkson	GE	Intime	SL	4 companies
(Year)	2007	2008	2009	2010	2007-2010 (4 years average)				
Fixed Asset to Long term Liability Ratio	0.12	0.21	0.37	0.40	0.28	1.08	0.46	1.67	0.87
Current Liabilities to Net Asset Ratio	0.70	0.68	1.00	1.30	0.92	1.33	0.72	2.06	1.26
Current Liabilities to Stock Ratio	13.9	12.8	22.3	25.6	18.7	24.0	35.5	8.19	21.6

Source: From This Research

Fixed Asset to Long term Liability Ratio

For Fixed Asset to Long term Liability Ratio as an example, fixed assets are for the long-term finance source. If the rate is lower, source of funds is more stable; and that "Fixed Asset to Long term Liability Ratio" has lower value, the company financial crises in the lower chances (Zhou and Lo, 2007). Parkson in 2005 after listing obtain sufficient funds to support enterprise expansion; with increased number of their branches. The "Fixed Asset to Long term Liability Ratio" also from 2007 0.12 rose to the 2010 0.4 (increase 230 per cent). but relatively 4 companies four years on average 0.87 (Table?), Parkson's long-term funds are very stable to show their strong competitive edge.

Current Liabilities to Net Asset Ratio

Parkson's "Current Liabilities to Net Asset Ratio" from 2007 the 0.7 climbed to the 2010 1.3, the Corporation of the four years liabilities of the flow rate is increasing much faster than 85 percent assets mainly because accounts payable at an annual increase of 10 per cent in 2010 as well as the new bank loans . Meet money raised as the result Parkson's business expansion for the sale proceeds (GSP) by the 200 7 years of people dollar 9,000 million RMB to 2010 14,100 million RMB(see Figure 6). Its 2010 still in the ratio between industry average 1.26, current liabilities of the problem is not serious.

Current Liabilities to Stock Ratio

The Parkson with the rest of three enterprises department store business for the operation license model (high as 90 per cent, see the chapter 2.3 operating capacity Analysis Section, the inventory is for direct sales only for the part of the business. China's stock is high in proportion because of its business supermarket business is in the heavy rate. Looking back at the rate department store industry 21.6, Parkson's "Current Liabilities to inventory ratio"18.7 is at a reasonable level.

Financial structure analysis: After overall analysis, Parkson in the above the ratio is better than the industrial standard level.

2.3 Paying debt ability

(Company Name)	Parkson				Parkson	GE	Intime	SL	4 companies
(Year)	2007	2008	2009	2010	2007-2010 (4 年平均值)				
Current Ratio (%)	209%	178%	112%	121%	155%	87%	78%	60%	95%
Quick Ratio (%)	201%	170%	108%	117%	149%	82%	75%	47%	88%
Stock Credit Index	(14.12)	(10.97)	(3.67)	(6.48)	(9.31)	0.09	0.18	0.27	-2.2
Cash Ratio (%)	182%	152%	96%	87%	129%	76%	36%	36%	69%
Total Debt Ratio (%)	68%	64%	64%	64%	65%	59%	51%	67%	60%
Debt / Equity Ratio	1.31	0.76	0.67	0.35	0.69	0.15	0.18	0.38	0.35
Long Term Debt Ratio	0.57	0.43	0.40	0.26	0.40	0.10	0.14	0.19	0.21
Total Debt / Fixed Asset Ratio	7.48	4.83	2.90	3.21	4.60	1.23	2.01	1.10	2.23
Time Interest cover ratio	3.88	4.39	4.85	4.75	4.47	73.6	10.8	4.8	23.4

Current Ratio /quick ratio - the department store in the franchising license sales to obtain large quantities of cash, the cash-flow generally very healthy. And the Parkson mobile and quick ratio from 2007 of 2.1 times and 2 times the dropped to 2010 1.21 times and 1.17 times. The reason is that there is a 1,300 million long-term debt due to be credited (for 10 years current liabilities 21.7 percent). And the Parkson the flow and quick ratio, are better than the industrial level 0.95 and 0.88 because its cash levels are sufficient (The following mentioned).

Stock Credit Index - Parkson 4 years of inventory confidence of the market has been negative because of its current assets/liabilities long-term is poor. Parkson industry because their own inventory level is low, therefore, this index department store industry is not that important.

Cash ratio - the ratio of Year 07 182 percent to 10 years 87 percent; Parkson's cash level while fell, however, mainly due to an increase of bank loans due current liabilities (rose 61 per cent). But the ratio is higher than the industrial level 69 percent.

Equity and Debt Ratio - Parkson in the two rates higher than industry (0.69 than 0.35 and 0.4 than 0.21) because, in its positive financial policy, interest in recent years more favorable in using long-term loans to expand the company business. In the last four years of indicators decline is due to repay the due, in the long-term loan (reduction of 40 percent) and Owner rights increased by 60 per cent. With the current Parkson now yield far higher than the assets liabilities cost rate (2010 the 19.2 percent 9.3 per cent) and favorable to their additional profits; its indicators also trend downward,-2010 are very close to the industrial level 0.35 and 0.21 level, and therefore its long-term loan repayment capacity is sound.

Total Debt / Fixed Asset Ratio - Parkson financial policy adopted a low fixed assets to increase policy liquidity, and hence their fixed assets than with similar size of the industry low by half (2010 fixed assets: Parkson of 24,900 million RMB, and the remaining three enterprise average value of 35,400 million RMB) the lead to higher than in the indicators industry more than double standard. In view of its gearing ratio and peer similar (60 percent) and its realized capacity while not high but the company itself future development there is no negative effects.

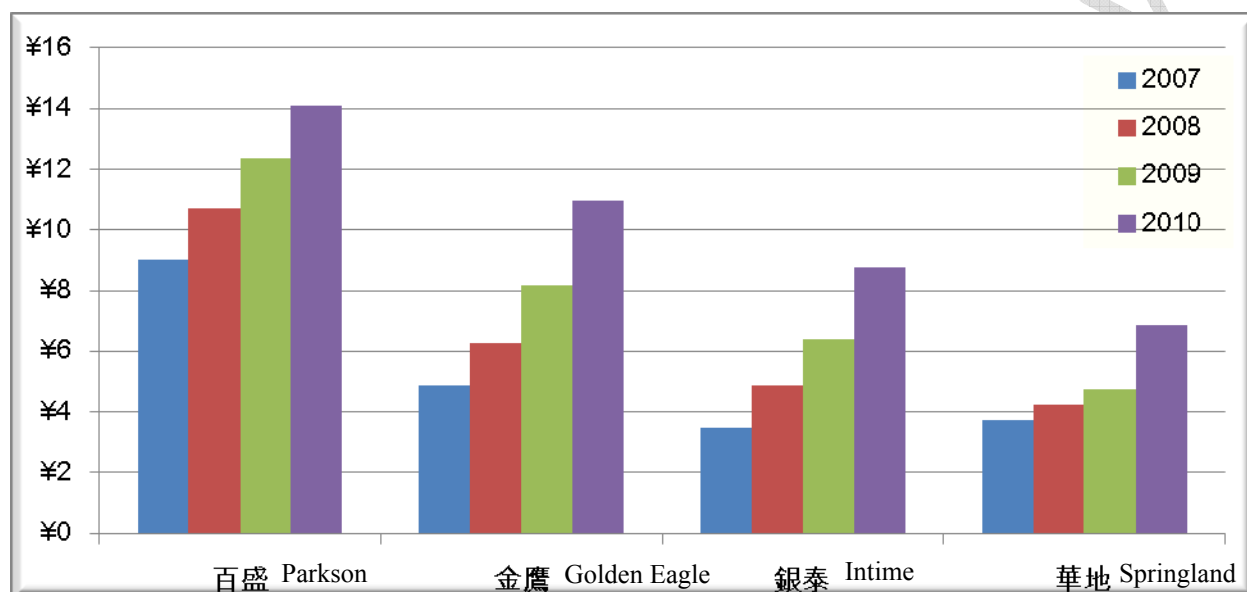
Time Interest cover ratio - except that Golden Eagle (73.6 times) due to its liabilities is higher than standard level (23.4 times), Parkson to this indicators (5 times) are satisfactory and that while close Golden Eagle, three companies indicators (6.7 times).

Paying debt ability – Parkson in the capacity of outstanding, not only its cash ratio, the study also found its financial strategy used effectively leverage ratio of enterprises the additional profits; although fixed assets are not too many so not affecting the overall ability.

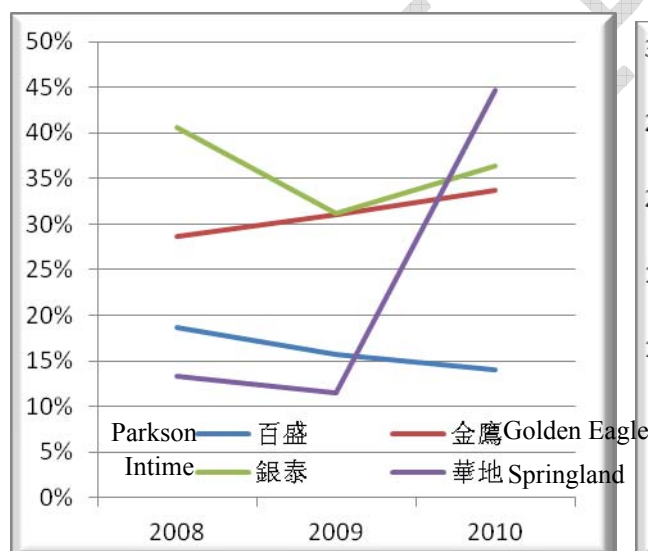
2.4 Operational ability

Parkson's total sales proceeds (Licensing counters 特許專櫃 sales revenue, direct marketing, the rent, management fees, and miscellaneous income) in the past four years each year, increased, from 2007 of 9,000 million RMB to 2010 the 14,100 million RMB, 2010, a growth rate of 14.1 percent, of which 11.4 percent of sales growth, and the remaining from 2009/10 two-year opening shop. The following the Parkson and Golden Eagle (3308), the Intime (1833) and Springland (1700), the three companies' department store performance of comparison.

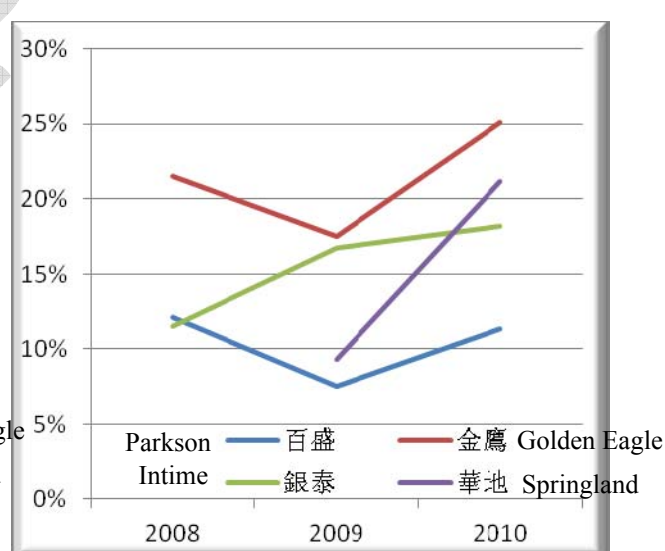
Sales (Unit : 1 billion RMB) (Source: the enterprise Annual Report, 2007-2010)



Sales Process Rate

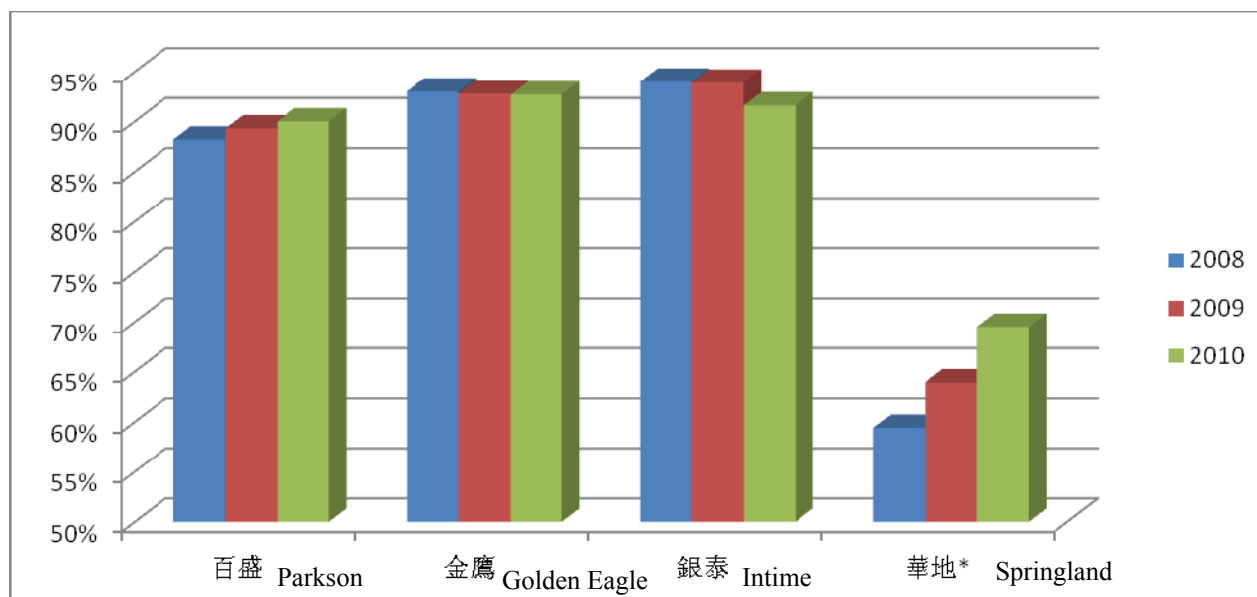


Sales Growth Rate



Sales process and sales growth ratio - The data was shown, the Parkson remains four department store company sales in the highest (14,000 million, compare to the second higher position Golden Eagle over 3,000 million) but in recent years growth rate (14.1 per cent) were less than competitors (average 32.1 percent).

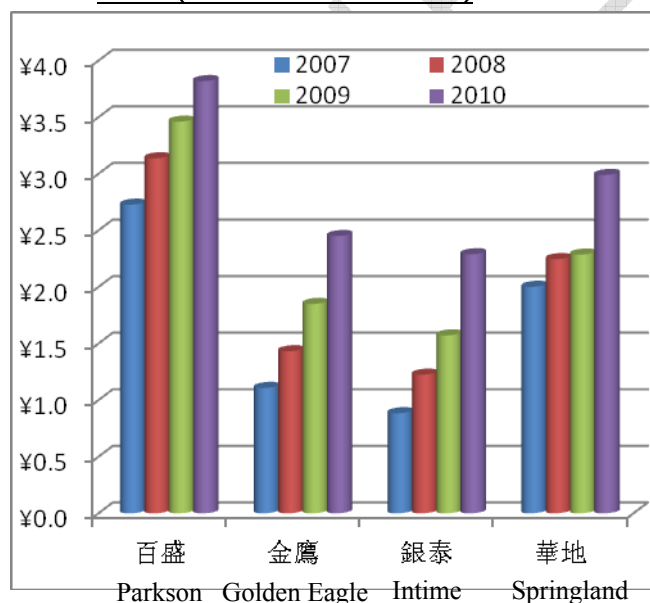
Licensing Counters 特許專櫃 Sales Ratio



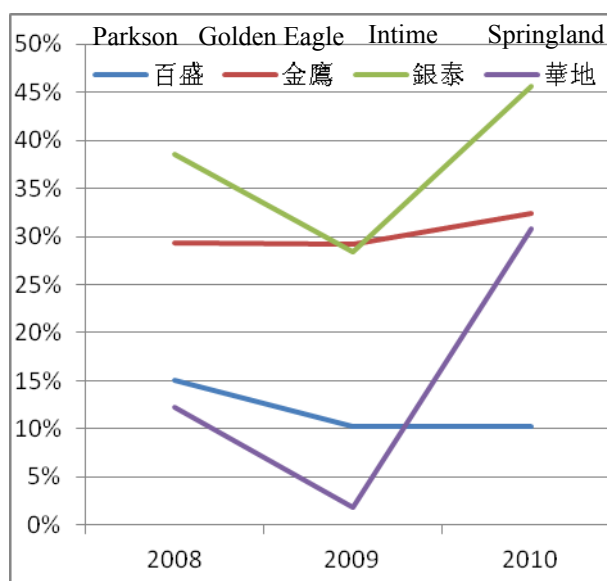
**The lowest ratio of Springland exclusive supermarket revenue*

The licensing counters another importance profit margins, and rate of return is more direct sales, Parkson 2010 counters license the deduction rate point to 19.2 percent, direct sales are higher than the 19 percent gross profit margin, direct sales operations should be deducted the profits salesmen's salary and stock is also involved procurement and management, resulting low rate of return. The Parkson's license counters less than opponent turnover (Chartered counters commissions, direct sales income and rental income and miscellaneous income) growth and low in industry (below Figure) (the enterprise Annual Report, 2007-10).

Sales (Unit : 10 billion RMB)



Sales Growth Rate



Operating expenses - Parkson company's operating expenses including rental expenses, expenditure on their salaries, depreciation and other operating expenses (including electricity and water, promotion and pre-opening cost.) Using turnover as the based amount, Parkson and peer operating expenses total turnover than as an example.

	Parkson					Golden Eagle	Intime	Springland	
(Company Name)	百盛					金鷹	銀泰	華地	4 Average
(Year)	2007	2008	2009	2010	4 yrs avg	2007-2010 (4 years average)			
employee costs	9.8%	8.4%	8.0%	9.4%	8.9%	9.1%	13.1%	9.8%	10.4%
Depreciation and amortization	4.2%	4.9%	4.8%	4.7%	4.7%	5.0%	10.4%	6.8%	6.7%
Rental expenses	11.9%	12.1%	14.5%	15.1%	13.4%	3.6%	13.1%	1.5%	8.3%
Other expenses	17.3%	17.5%	17.2%	18.8%	17.7%	14.5%	18.4%	11.3%	15.8%

From the data analysis to show Parkson the rental expenses above industry average (61 percent higher) because, in the company is more a shop is a rental property model of operation. Depreciation and amortization expenditures were lower than industry 29.8 percent, show department store a deterioration, is installed repair the capital expenditure has been completely depreciated. As for the other operating expenses is higher than the industrial standard 12 percent of the opening branches in recent years economic benefits unsatisfactory.

(Company Name)	百盛					金鷹	銀泰	華地	4 average
(Year)	2007	2008	2009	2010	4 yrs avg	2007-2010 (4 yrs average)			
Total assets turnover	30.3%	31.9%	31.3%	30.3%	31.0%	30.7%	18.6%	49.0%	32.2%
Average Collection Period	3	2	3	2	2.5	7	3	1	3.3
Days' Sales in Inventory ⁽¹⁾	61	70	63	78	68	148	98	83	102
Payment period ⁽¹⁾	61	59	59	58	59.3	57	63	51	229

Note 1 : In department store of the industry, the method of calculation:the inventory and accounts payable turnover periods should be the most importance : Days' Sales in Inventory = main business cost/ stock

Accounts Payable turnover days = Accounts Payable / [Concessionaire Sales x (1 -扣點率) + goods cost of sales] x 365

特許專櫃扣點率 (Parkson, 2010) *1

Total Assets Turnover - Parkson's total assets turnover of 4 years are maintained to the stable level around 31%. And this targets are also relatively peer average level of 32.2 percent.

Accounts Payable Turnover days - department store's transactions are cash and credit card, there is no bad debts risks, the Parkson debtors turnover days is close to zero which is same as the peer group.

Inventory Turnover days - Parkson's the inventory turnover days are on rising trend (4 years growth 27 per cent) because, in the newly opening period should need additional procurement of goods, but the overall level is still below the industry 3.75 .

Accounts payable turnover days - the Parkson generated counters payment license, the accounts payable including the license return counters the sale and direct sales of suppliers arrears, Parkson accounts payable turnover days maintaining a stable some 60 days, and close to 58 days (peer group).

Operating Capacity Analysis - Parkson's business growth slowdown is mainly the license counters less than the peer group, with the increasing operating costs and lead to net profit margin behind industry.

2.5 Profitability

Profitability		Parkson		Golden Eagle	Intime	Springland	
(Company Name)	百盛	百盛	金鷹	銀泰	華地	4 Average	

(Year)	2007	2008	2009	2010	2007-2010 (4 yr ^{*1} 及 3 yr ^{*2} Average)				
Net profit ^{*1} (1 million RMB)	727.8	841	911	992	855	552	472	266	536
Net profit growth ^{*2}	n.a.	15.6%	8.3%	8.9%	13.8%	94.0%	25.6%	21.7%	38.8%
Gross profit margin ^{*1}	68.3%	68.7%	69.9%	71.2%	69.5%	78.3%	79.3%	40.2%	66.8%
Net Profit Margin ^{*1}	26.7%	26.8%	26.3%	26.0%	26.0%	32.6%	33.3%	11.0%	25.7%

Gross profit margin - because Parkson's business is not directly product sales, and therefore its high profit margin of the Trade characteristics. The gross profit margin in four years license with counters rate 3 per cent of the improvement 71.2 per cent, but in comparison with Golden Eagle and Intime average of the 78.8 per cent are less 7.6 per cent. The differences are mainly because the license Parkson counters ratio and Golden Eagle and Intime also 2 ~ 3 per cent discrepancy.

Net profit margin - if comparison Golden Eagle and Intime's average net profit margins 33 per cent, Parkson's 26% obviously low (Springland's net profit margins of supermarket business' impact, the other enterprises different). The main reason is Parkson turnover growth (the 07/08 15 % to 09/10 years of 10.3 per cent), plus operating expenses with increasing number of their branches (07 years of 17.3% to 10 years of 18.8 percent) thus the net profit margin is less than others.

(Company Name)	百盛				金鷹	銀泰	華地	4 間企業
(Year)	2007	2008	2009	2010	2010			
Total Assets Turnover	30.3%	31.9%	31.3%	30.3%	30.7%	18.6%	44.6%	31.1%
Leverage ratio ^{*1}	3.1	2.9	2.8	2.8	2.2	2.3	1.8	2.3
Return on Equity (after tax) ^{*2} (%)	25.4%	24.9%	23.5%	22.3%	25.1%	11.9%	18.6%	19.9%

Note 1: Leverage ratio = Total assets/Equity

Note 2: DuPont Financial Analysis on Schedule 7

Total Assets Turnover – Parkson's four years average 30.3 per cent, as the industry 31.1 per cent.

Leverage ratio/ Return on Equity (after-tax) - Parkson's Return on Equity a slight decline (2010 - 2007 rate of return less of 3.1 percent, dropping for 12%). The main reason is falling of profit margins due to the increasing expenditure (07 years of 17.3% to 10 years of 18.8 percent); assets turnover in industry, is the level of excellence, and leverage ratio (07 years 3.2 down to 10 years of 2.8) is the cause Return on Equity fell by the one of the reasons. Compared with counterparts, Parkson's return on equity has remained at a relatively high level 22.3 percent, right after Golden Eagle 25.1 percent.

Profitability analysis – in this capability analysis of indicators that can be found Parkson's been ability more industry inferior. Recommendation Parkson should be increasing number of counters to improve net profit rate, as well as by leverage to raise return on equity.

2.6 Growth ability

Ability	Parkson	Golden Eagle	Intime	Springland		
(Company Name)	百盛	百盛	金鷹	銀泰	華地	4 Average

(Year)	2007	2008	2009	2010	2007-2010 (4 years average)				
Retained yield (times)	3.8	3.9	3.8	4.1	3.9	5.0	8.6	6.0	5.9
Self-sustainable Growth Ratio (%)	95.2%	96.1%	89.7%	90.9%	93%	91%	100%	100%	96%

Retained yield - Parkson by retained earnings and after-tax for four years in a proportion (07-10 years, retained earnings growth 52 per cent, after tax profit growth 41 per cent) and the indicators have been in 4.0 times over the industry than average 5.9 times, the belief in Parkson need to pay dividend to shareholder in order to gain their supports; also needs to maintain a certain amount of reserves to develop business. Looking over their retirement yield very steady, we can see that it has been both the appropriate balance way. In the past four years Parkson's sales proceeds from the total for 56.6 percent rise, 4.0 times the rate of return is retained at reasonable levels.

Self-sustaining growth - four years Owner rights increase (60 percent) of more than retained earnings increase (52 per cent) led by Parkson self-sustaining growth rate of 5 percent. Relative industry average of 96 percent, Parkson with need to increase retained yield to maintain their self-sustaining growth rate in intra-industry level, otherwise, for its sustainable development to be affected.

Growth Capacity Analysis – Parkson's business growth capacity levels behind its peer group which is necessary to get an improvement.

2.7 Stock Market Prospects Analysis

	Parkson				Golden Eagle		Intime	Springland	
(Company Name)	百盛				百盛	金鷹	銀泰	華地	4 average
(Year)	2007	2008	2009	2010	2007-2010 (4 年平均値)				
Earning per share (HK\$)	1.31 ^{*1}	0.34	0.37	0.42	0.35 ^{*1}	0.34	0.31	0.21	30.3
Price-earning Ratio (Times)	13.89 ^{*1}	35.98	33.13	29.20	36.28 ^{*1}	70.6	0	0	
Dividend yield (%)	45.7%	48.0%	46.2%	45.3%	46.3%	55.1%	37.4%	32.9%	43.2%

Note 1: Parkson in 2007 Shares will be demolished 1 split in 5, the average to 1 demolition before the split calculation.

Parkson P/E ratio the four years down the 62 percent to 2010 the 36.28 times, and the dividend rate has been maintained at about 46% water Ping. Although the average dividend less than rate Golden Eagle, the pursuit of dividends return stability while Parkson is better (Golden Eagle to 08/09 years dividend rate up to 80% and 90 percent, however, 10 years then dropped to 30 percent). In the present P/E RATIO, Parkson are the similar level of the industry about 30 times, showing that price fully reflected its value.

Stock Market Prospects Analysis – Parkson's dividend stable returns to investors, its stock is at a reasonable level.

3. Parkson's Corporate Governance assessment

Chapter 2 from the financial assessment analysis, we understand that Parkson's appearance growth slowdown and operating costs, and so, and direct affect for its enterprise development in the future and the shareholders' interests. We in this will explore Parkson of corporate governance of its financial performance of the hill and, in its internal control and risk management to check their existing mechanism has insufficient, to make appropriate recommendations.

3.1 Corporate Governance of business organization and its impact and importance

Since 1998 Asian financial turmoil and 2002 a series of international business scandal events (such as the Enron, the World Telecommunications, the Eurasian agriculture, serious impact on the stock market investors to lose the confidence for fund-raising; and begin to understand that if a company's own governance is not well, if Enron International enterprises, they can easily collapse. Therefore, Governments also focused on the tightening supervision regulations.

The Ho and Li (2008) pointed out that corporate governance is how an organization can have decision-making powers and responsibilities assigned to owners (shareholders), Board of Director (policy makers) and high-level managers (managements) three main people, and determine their interrelationship, including how authorization, mutual monitor, incentive and accountability. The ultimate promotion bodies performance and long-term sustainable value, protection of shareholders and other stakeholders' rights and interests.

Ho (2003) quoted McKinsey consulting company in 01 to global more than 200 institutional investors of research, which stated over 80 percent to "Corporate Governance" good corporate pay premium; in Asia, premium the proportion of 20 percent to 27 percent. Corporate Governance sound enterprises can attract more funds to get higher returns, with a more competitive strength.

3.2 Parkson existing Corporate Governance

Parkson from the Lion group in Malaysia, although the 05 years the initial independent of the Lion group, but in fact **Golden Lion and Parkson President is the same Chung Ting-sum**; therefore to a certain extent Parkson is Golden Lion **family-controlled business**. Parkson in a high percentage of shares (direct large shareholders holding shares PRG 70 percent) Representative major shareholders also the directors and senior management level, direct control over the board of directors.

Although the shareholders directly management does not mean low corporate performance, and, conversely has its advantages such as the Acting lower-cost, decision-making high efficiency, an initiative, and loyalty and market flexibility. From Xu (2008) proposed by the return on assets into account (ROE), total assets yield (ROA) to measure the company performance, in general its performance is still in the industry.

(Company Name)	百盛				百盛	金鷹	銀泰	華地	4 間企業
(Year)	2007	2008	2009	2010	2007-2010 (4 年平均値)				
ROA (after tax) (%)	8.1	8.9	8.5	8.1	8.4	9.7	5.8	5.3	7.3
ROE (after tax) (%)	25.4	24.9	23.5	22.3	24.0	25.1	11.9	18.6	19.9

But we find Parkson in the following several aspects of corporate governance, there is relative unbalanced status, may have directly damaged on the economic efficiency for the enterprises:

Lack of transparency on operation - Lion group operations are numerous, Parkson in its scope of business partners within the number of the lion group is connected business in its annual report has not fully disclosed. In addition, Parkson under the present the directors and managing director of Chung Wing Chun has with the Group of Companies directors. The related connected operation did not disclose. If a Parkson's Lien camp Company "Shanghai 9 Sea Lion property management, how many Parkson's business is to the Company has not been documented examination.

Connected transactions through the minority shareholders' interests - ...

Monitor Board of Director failure - ...

Credit Risk - ...

3.3 Suggestions for improvement

We recommend that Parkson pay attention to these issues, further consider the following suggestions for improvements:

1. The directors and management team members of the separation - management team is separated from members of the Board under the supervision and appointment, but too many of directors serve in the management team, restrictions on the independence of the management team.
2. Back to the independent directors monitor efficiency - strengthening the board of directors credibility and the public and small shareholders of the confidence.
3. Strengthening on transparency of enterprises - open more with the connected up operating transaction information to release small shareholders' worries in public
4. Tighten the internal control - the internal controls and responsibilities to unclear, unable to play monitoring whether the departments effective trading. The strengthening of the Centralize Internal Control Panel's functions, the irregular spot checks to confirm departments at any time waiting is to smooth the operation.
5. Credit Risk Management - the internal self-credit rating assessment, improving the company operations to the financial institutions in the public for the target ratings in order to improve the financing costs of the company.

4. Investment Project Appraisal

Parkson plan this year in Jinan opening of a new department store, an area of 33,800 square meters, the company program buying property for long-term use, the property used for 50 years. The funds 378 million RMB (for 2010 turnover 38,900 million RMB for 9.7 percent.) We will use a different financial ratios, including net present value measure (Greenwald, Kahn & Sonkin, 2005) for an investment assessment.

4.1 Project items basic information

Project Costs		Remarks
Mall area (square meters)	33,800	(Existing Jinan 濟南Project's Branch area)* ¹
Building price (人民幣/平方米)	10,000	(Existing Jinan 濟南Project's Branch-Parkson purchase price)* ¹
Department store (1 million RMB)	338	
Decoration (1 million RMB)	40	(Parkson-cost in the past, about every square meters 1200 RMB computing)* ¹
Total Cost (1 million RMB)	378	
Remaining basic information		Remarks
Parkson Building depreciation years	50	(China's accounting legislation)
Decoration period (years)	5	(Parkson regular approach)* ¹
Sales growth rate	12%	(Parkson 2007-2010 average)* ¹
ultimate growth rate	3%	(assume long-term investment growth)
EBITDA (%) 利潤率	38%	(Parkson 2010)* ¹
Operating period (days)	10	(Parkson 2010)* ¹

Note 1 : Source from Parkson 2007-10 Annual reports

4.2 The first year calculation of sales

Project items		Remarks
Sales per square meter (RMB)	10,000	(Parkson 2010)* ¹
Counters 特許專櫃sales ratio	90%	(Parkson 2010)* ¹
Direct Sales Ratio	10%	(Parkson 2010)* ¹
Total Sales (1 million RMB)	338	濟南Branch area 33,800 square meter x RMB10,000/sq. m.
特許專櫃扣點率	19%	(Parkson 2010)* ¹
Counters 特許專櫃commission (1 m RMB)	57.8	總銷售額 x 特許專櫃比率 x 扣點率
Direct Sales (1 m RMB)	33.8	總銷售額 x 直接銷售比率
Sales (1 million RMB)	91.6	

Note 1 : Source from Parkson 2007-10 Annual reports

4.3 Computing Tax Cost

Items (Unit: 1 million RMB)	1 Yr	2 Yr	3 Yr	4 Yr	5 Yr
Sales = Last Year Sales x (1+Growth rate)	91.6	102.6	114.9	128.7	144.1
EBITDA (38%)	34.8	39.0	43.7	48.9	54.8

	6.8	8					
Depreciation = -(Building cost/50+Decoration/5)	-14.8	-14.8	-14.8	-14.8	-14.8	-14.8	-14.8
EBIT:	20.0	24.2	28.9	34.1	40.0		
Tax cost (Standard tax rate: 25%)	-5.0	-6.1	-7.2	-8.5	-10.0		
Profit:	15.0	18.2	21.7	25.6	30.0		

4.4 Cashflow calculation

Items (Unit: 1 million RMB)	Initial cost	1 Y r	2 Y r	3 Y r	4 Y r	5 Y r
EBITDA		34.8	39.0	43.7	48.9	54.8
Expenditures*1		(0.9)	(1.0)	(1.2)	(1.3)	(1.5)
Expenditures*2		(8.0)	(8.0)	(8.0)	(8.0)	(8.0)
Tax expense		(5.0)	(6.1)	(7.2)	(8.5)	(10.0)
Cashflow*3:	-378.0	20.9	23.9	27.3	31.1	35.3

Note 1) Working capital the first year calculation => annual direct sales x operating cashflow period/365=33.8mX(10/365)=0.93m

Working capital for the rest calculation => the previous year working capital x(1+Sales growth rate)

Note 2) assumption for expenditure to pay for the annual decoration cost, about 40 million/5 year = 8 million per year

Note 3) Cashflow after 5 years, using the assumption the ultimate growth (Appendix 8)

4.5 ARR and NPV calculation

ARR	
Total income for 50 years*1	2,971.2 m
Average Profit (A)	59.4 m
Initial cost(B)	378.0 m
ARR (A/B):	15.7%

NPV :

r = 10.5% (2011 Parkson ROA)

t year = cashflow at t th year/(1+r)^t

Note 1) Appendix 8 "Tax expense", "Profit"—Total amount for 50 years

Year	Cashflow	PV	Year	Cashflow	PV
Initial cost	-378.0				
1 s t	20.9	18.9	6-10	193.1	87.2
2 n d	23.9	19.6	11-20	483.3	104.6
3 r d	27.3	20.2	21-30	649.6	51.8
4 t h	31.1	20.8	31-40	873.0	25.6
5 t h	35.3	21.4	41-50	1,173.2	12.7
NPV= all cashflow for 50 years - Initial cost :					4.95

4.6 PAYBACK PERIOD and IRR

Payback period	1 million RMB
1-13 Profit (A)	398.2
Initial cost (B)	378.0

Payback period =	133 months
	<u>11 Years 1 month</u>

IRR=10.6% (Appendix 8)

4.7 Investment appraisal

From the data analysis results, the Jinan new branch for the payback period is 11 years and 1 month and net present value is positive value. Therefore, the project investment appraisal as a positive return, and should also help group in exploring sales network, the proposed Parkson should carry out this item.

4.8 New project appraisal methods for analysis

- i. Investment returns- the first-year 4 per cent (Schedule 8), but the more Parkson maturity and investment returns will gradually to high. Investment return the advantage of a simple calculation; the disadvantage is that there is no consider the funding time value.
- ii. ARR – 15.7% , higher than the company's current return on assets to display the item for investment. The average rate of return strengths of each year calculated the average return on investment and reflect the long-term return projects.
- iii. NPV – 2011 ROA 10.5% , NPV 495 million RMB °
- iv. IRR – 10.6% containing low rate of return the advantage of being able to life with the proceeds with total investment of been, noting that the rate of return projects, facilitate its industry standards for investment yield comparison to determine whether the project is worth to evaluate, but IRR performance of the rate is not absolute, an internal rate of return program with low, as a result of the larger and larger net present value, and therefore more worth for the evaluation.

4.9 Suggestion for cashflow of new project

The department store is most sales through an authorised counters such manner, involving a liquidity. If the first year Jinan new branch the necessary cashflow of around 8,900 million RMB (about Parkson 2010 0.23 percent proceeds, and on the net cash flow of 0.39 percent) and can deploy company internal resources are sufficient to meet the liquidity requirements.

5/. Financing and capital management

Parkson now to the Jinan new projects initiated additional cash, a total of 378 million RMB (about 2010 total assets of 3%). We will analyze the various financing program of Parkson capital management of analysis pros and cons.

5.1 Financing methods for analyzing

1 million RMB	Parkson				金鷹	銀泰	華地
	2007	2008	2009	2010	2010		
Cash and equivalents	3,642	3,649	3,856	5,238	2,346	1,462	1,538
Bank loans	1,417	2,207	2,241	2,961	458	2,818	123
Cash ratio	182%	152%	96%	87%	56%	37%	71%
retained profit	3.8	3.9	3.8	4.1	3.6	7.6	10.0
Net debt ratio ⁽¹⁾	-77.6%	-41.8%	-41.2%	-50.5%	-51.3%	25.5%	-37.4%
Net Interest Expense ⁽²⁾	74	86	107	140	-33	2	75
Net Interest expenses/turnover	2.7%	2.7%	3.1%	3.7%	-1.3%	0.1%	2.5%

Note(1) Net debt ratio = (bank loans - Cash) / Equity Note(2) Net Interest Expense = interest payments - interest income

- i. cash payments – internal retained earnings/cash as sources of funding. Parkson financial status is stable, in the past four years are all at net cash status, the net debt ratio is negative. But its cash ratio has been industry than 20 percent higher on the domestic financing after 380 million its cash ratio is as high as 81 percent, average industry still high 10 percent. Although retained earnings ratio would drop to 3.9, believe the enterprises little impact on future development.
- ii. **bank loan financing** – Parkson's major banks partners, the Chinese people provided by banks for long-term loan interest rates of 5-year interest rates on loans interest rates 2.35 % calculated the (2011 on 6 April public bank interest rate at 6.8 percent) (China Bank, 2011) . The net interest expenditure will be raised is now total turnover 3.7 per cent of the ratio will be increased to 3.85 per cent. Although the 1.34 percent more than the peer group, but has not been significant.
- iii. Commercial credit financing - mainly in the line on the line of business partners and the money received in advance and money credit too easily. But because it is directly to customers charge a fee (receivables of 2.5 days) and therefore to cope with the line partners for accounts payable to credit transactions. The main partners Parkson for the counters' customers now meet money working capital to 58 days for the industry also average. But the department store industry use this method of financing, where the individual counters customers to its fund-raising Limited, to raise 380 million RMB will need to negotiate with great deal of customers, therefore, not feasible.
- iv. Issued share capital fund-raising - such as raise 380 million RMB, its distribution costs have reached 8-12% than the general bank loan for high interest rates. The new shares fund-raising will reduce shareholders' equity ratio, and shareholders to creditors to more than often return high, and therefore the liabilities rate is not high, was not proposing shares fund-raising.

v. Sale of assets - Parkson the fixed assets for than 0.4, far below the level industry 0.7. But their fixed assets of its department Store property, sale on the contrary to rent their operating costs of increasing the pressure (because of its net profit margin is 26%, rental expenses 15.1% compare with the peer group 8.3% is almost double.

5.2 Financing method proposed

With the above analysis, the proposed Parkson should adopt the bank long-term loan program for 380 million RMB financing and annual interest of 9.15%, 5 year amortization. Expected 2011 year, the main financial data are as follows:

Financail items	2010 Actual	2011 Budget	Industrial 4 Year Average	Assessment
-----------------	----------------	----------------	------------------------------	------------

Fixed Asset to LTL Ratio	0.4	0.45	0.87	Positive
Debt / Equity Ratio	0.35	0.38	0.35	Healthy
Interest expense to Sales	3.7%	3.85%	1.43%	Healthy
Debt Ratio	-50.5%	-46.3%	-28.3%	Healthy

In considering borrowing after the company's debt service capacity as a whole no major impact, but further improve the Company's financial structures; and the operating expenditure new branch substantial of the reduction, are expected to increase the enterprises operating capacity.

6/. Recommendations and audit program

After this data analysis, we have proposed Parkson operational audit of the following three points:

1. 特許專櫃VIP counters sales ratio - raise the license sales counters, could help improve profit margins, and reduce inventory management, thus increasing rate of return. To achieve this, the company should have internal decoration, increase department store, grades, thus attracting more popular and high-end the counters positioning department store, commodities rose can boost stores with growth rates.
2. Other operation costs to sales turnover rate - Parkson other operation costs to sales turnover ratio is increasing as the new branches pre-set cost is increasing, for each new branch of a more pre-set up cost of financial budget, which effectively controlling the expenditure. Rental expenses are the major item for operating costs so the proposed analysis to reduce operating costs should be for the financial comparison between rental expenses and property ownership.
3. Operational Governance - Parkson growth behind industry reflect of its business to operate a room for improvement. Recommends that the corporate may in the following to conduct a review Research:
 - management mechanism - including the independent directors is effective, top-level core team of diversity is adequate planning for the future new point; whether it has tried to ensure that company to comply with good governance code to all the shareholders maximum benefits to premise of the Company.
 - internal monitoring mechanism - objectives and responsibilities are clear, whether to enhance operational efficiency, provide standards do and may rely on information, protect the security of assets complete and appropriate use, the Business Plan and the strategic decision-making and effective implementation, compliance on the laws and regulations for 5 areas (COSO, 1999).

7/. Conclusion and Recommendations

...

8. References

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Another Example

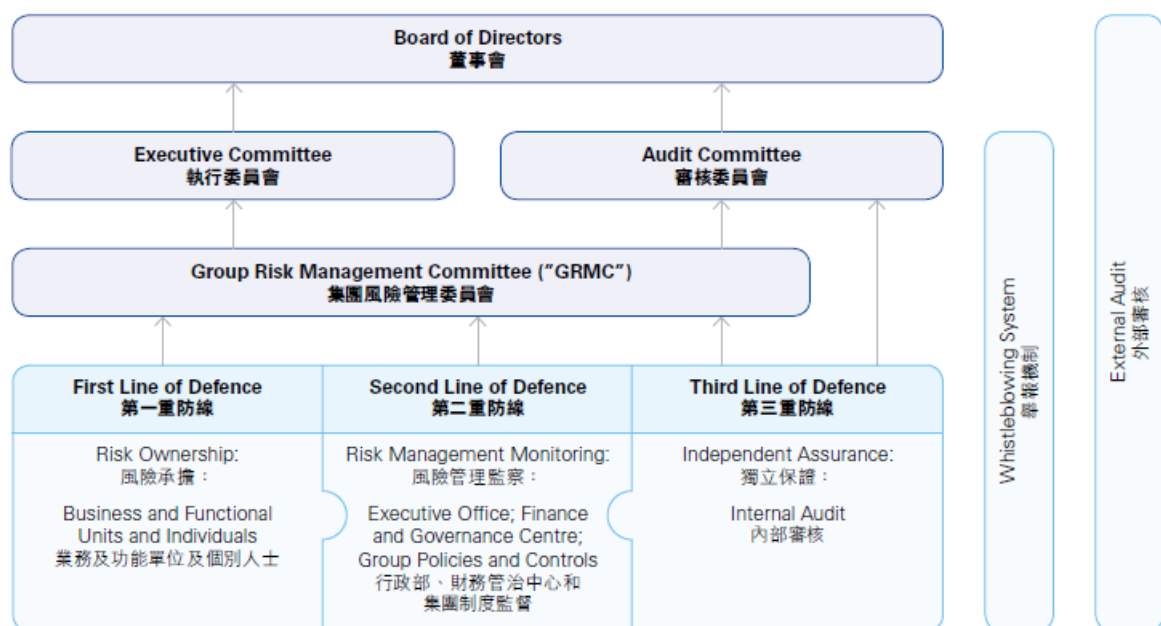
3. Corporate Governance – Internal control and risk management

Corporate Governance is crucial for a company as a responsibility to the business's interest of the shareholders for transparency, fair and accountable (Arjoon, 2005). In this chapter, we will study CTFJ's governance system and its risk management, followed by recommendations to enhance efficiency.

3.1 Corporate Governance System

CTFJ has a transparent and well-defined governance system, as reflected in its annual report (Chow Tai Fook, 2019, pp. 105-189).

Figure 3-1 Corporate Governance System



Source: (Chow Tai Fook, 2019, p. 166)

Its risk governance system is articulated between:

- (i) The Board Oversight helmed by the Board of Directors that appoints the Executive Committee and an independent Audit Committee that oversees the risk management and internal control systems on behalf of the board. The board is accountable for scrutinizing and assessing the CTFJ's policies are under legal and regulatory obligations, primarily the Listing Rules, the Companies Ordinance and the Securities & Futures Ordinance (Chow Tai Fook, 2019, p. 131).

(ii) Management Oversight through a Group Risk Management Committee comprises of Managing Director and executive directors from significant business and divisions, maintaining the risk management and internal control structure, and reviews principal risks quarterly (Chow Tai Fook, 2019, p. 167).

(iii) Three Lines of Defense (Chow Tai Fook, 2019, pp. 167-168) that comprises
First Line of Defense: Mainly is the business and function units.

Second Line of Defense: Made up of Executive Office, Finance and Governance Centre, and Group Policies. The above offices determine guidelines, processes, and benchmarks to underpin risk management and internal control systems. They also examine the prosecution of critical group guidelines such as anti-fraud policy, code of conduct, and crisis management policy.

Third Line of Defense: It is the independent audit department that reports to both the Group Risk Management Committee and the Audit Committee. Internal auditing independently assesses the suitability and efficacy of the risk management and internal control systems.

(iv) External audit offers opinions and measurements of the procedures. It conveys with board committees and management on any risk arising (Chow Tai Fook, 2019, p. 168).

(v) A separate whistleblowing system gives a private network to persuade staff to bring up matters on fraudsters, and misbehavior whilst assuring confidentiality and job protection (Chow Tai Fook, 2019, p. 168).

3.2 Transparency and board diversity within a traditional family business

CTFJ grew from a traditional family business, with 89% of shareholdings from the founding family (Chow Tai Fook, 2019, p. 162). To date, 4 out of 9 executive members are from the Cheng family helmed by Dr. Henry Cheng (Table 3-1). The rest of the board is from third parties, which forms more than 50% of the executive board, including the Managing Director, Mr. Wong Siu-Kee Kent.

The team of independent non-executive directors are all non-family members, which serves as chairmen or members of the independent nomination committee, remuneration committee, and audit committee, i.e., there is transparency and independence in the business.

Table 3-1 Executive directors from the Cheng family

Cheng Family members who are executive directors on the board	Responsibilities
Dr. Cheng Kar-Shun Henry (Chairman)	Strategic direction & overall performance of the Group
Dr. Cheng Chi-Kong Adrian	Strategic investment of the Group
Mr. Cheng Chi-Heng Conroy	Raw material procurement
Mr. Cheng Kam Biu Wilson	Bank and landlord relationship management

Source: Constructed by the author

Segregation of duties: The roles of Chairman Dr. Henry Cheng and Managing Director, Mr. Keng Wong, are well-defined. Dr. Cheng is providing leadership for the board and ensures the board delivers effectively. On the other hand, Mr. Wong is responsible for CTFJ's day-to-day operations and business developments.

Internal policies, controls, and practices: CTFJ has in place policies, controls and practices approved by the management led by Mr. Wong, including insider trading and business ethics, with an escalation process to the board for non-compliance. A review of internal controls is closely linked to its risk management framework, as defined above. The internal controls are subject to internal audits.

3.3 Compliance with Corporate Governance Code

Since its listing in 2011, there has been no adverse news on non-compliance with the Exchange. CTFJ compliance with all relevant listing rules and obligations outlined in Appendix 14 (HKEx, 2020a) of the Corporate Governance Code (Chow Tai Fook, 2019, p. 131). In terms of code of conduct covering insider trading (HKEx, 2020b), annual checks on directors and relevant employees have been conducted, and the above is in compliance (Chow Tai Fook, 2019, p. 171).

3.4 Emerging Risks and Challenges

Regulatory Risks: Other regulatory risks include environmental risk, local cyber-security risk, and Personal Data Privacy Ordinance (Hong Kong e-Legislation, 1996). CTFJ's production facilities are primarily based in China, and it must observe the local environmental regulations, such as carbon emissions. An annual sustainability report (Chow Tai Fook, 2019b) is published on both CTFJ & HKEx website. Separately, with an extensive online store, CTFJ has to ensure that there is sufficient protection on its customer information, including the General Data Protection Regulation in the European Union and Cybersecurity Law in China, are abided (Chow Tai Fook, 2019, p. 178).

Anti-Money Laundering: Jewellery and its products are at higher peril of being used for money laundering due to its size, weight, and value. Considering that anti-money laundering regulations do not bound the industry, jewellery retailers may not be equipped with the essential skills and competence to distinguish dubious trades. CTFJ employed third party consultants to assess and examine its internal controls, competency of staff in identifying fraudulent transactions, and executing adequate regulations (Chow Tai Fook, 2019, p. 171).

COVID-19 Risk: COVID-19 risk is unprecedented. There may not be adequate risk controls to meet the unprecedented disruptions in supply chains, temporary closure of outlets, re-deployment of staff, management of high inventories during lock-down periods, and implementing of other cost-cutting measures without compromising risk controls.

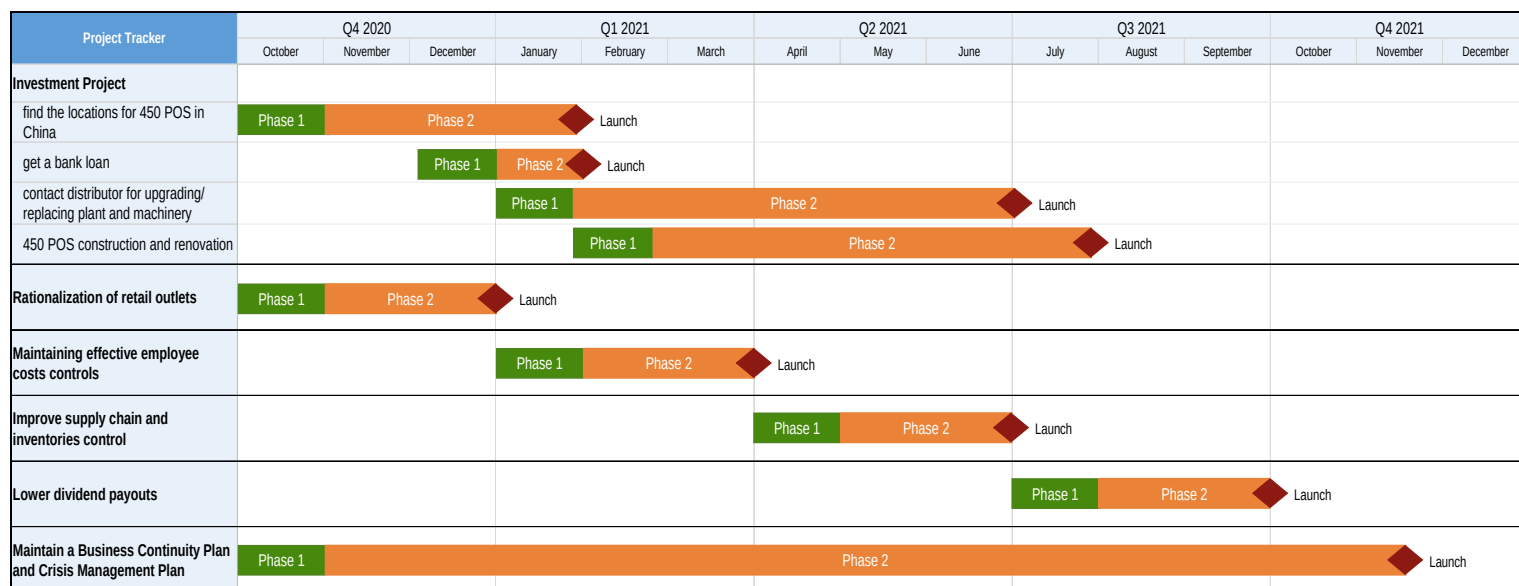
6. Conclusion and recommendation

CTFJ is financially healthy and has a growing potential compared to its peer in Hong Kong. The company is compliant with the corporate governance code, and it is transparent to its shareholders. An investment project is suggested to CTFJ and showing a good return in revenue.

6.1 Suggestions to CTFJ

Apart from the investment project proposed in Chapter 4, below are other prioritized suggestions that CTFJ may proceed in the coming quarters, that may improve the overall performance.

Figure 6-1 Gantt Project Chart



Source: Constructed by the author

Consolidated Income Statement

Year ended 31 December 2007

	Notes	2007 RMB'000	2006 RMB'000
Revenues	4	2,726,983	1,942,005
Other operating revenues	4	332,703	242,029
Total operating revenues		3,059,686	2,184,034
Operating expenses			
Purchases of goods and changes in inventories		(865,721)	(632,325)
Staff costs		(268,163)	(196,566)
Depreciation and amortisation		(113,812)	(88,737)
Rental expenses		(324,759)	(227,054)
Other operating expenses		(470,709)	(331,439)
Total operating expenses		(2,043,164)	(1,476,121)
Profit from operations	5	1,016,522	707,913
Finance income	6	253,161	75,047
Finance costs	6	(326,966)	(51,509)
Share of profit of an associate		535	538
Profit from operations before income tax		943,252	731,989
Income tax	9	(215,451)	(218,835)
Profit for the year		727,801	513,154
Attributable to:			
Equity holders of the parent		676,000	460,761
Minority interests		51,801	52,393
		727,801	513,154

	Notes	2007 RMB'000	2006 RMB'000
EARNINGS PER SHARE ATTRIBUTABLE TO EQUITY HOLDERS OF THE PARENT	10		
Basic		<u>RMB1.22</u>	<u>RMB0.83</u>
Diluted		<u>RMB1.22</u>	<u>N/A</u>
DIVIDENDS	40		
Interim		121,582	82,800
Proposed final		<u>211,000</u>	<u>149,040</u>
		<u>332,582</u>	<u>231,840</u>
DIVIDEND PER SHARE	40		
Interim		RMB0.22	RMB0.15
Proposed final		<u>RMB0.38</u>	<u>RMB0.27</u>
		<u>RMB0.60</u>	<u>RMB0.42</u>

Consolidated Balance Sheet

31 December 2007

	Notes	2007 RMB'000	2006 RMB'000
NON-CURRENT ASSETS			
Property, plant and equipment	11	818,705	749,923
Investment properties	12	222,104	227,368
Lease prepayments	13	420,470	431,550
Intangible assets	14	1,562,040	689,565
Investment in an associate	17	2,346	2,214
Other assets	18	248,477	107,408
Held-to-maturity investments, unlisted	19	1,460,920	1,561,740
Investment deposits	20	40,000	—
Deferred tax assets	21	34,971	45,460
Total non-current assets		4,810,033	3,815,228
CURRENT ASSETS			
Inventories	23	143,940	109,904
Trade receivables	24	18,974	18,489
Prepayments, deposits and other receivables	25	374,852	259,492
Investment deposits	20	781,450	—
Cash and short-term deposits	26	2,860,216	3,271,366
Total current assets		4,179,432	3,659,251
CURRENT LIABILITIES			
Interest-bearing bank loans	27	—	(83,886)
Trade payables	28	(1,144,716)	(871,618)
Customers' deposits, other payables and accruals	29	(735,720)	(611,097)
Tax payable		(123,129)	(113,518)
Total current liabilities		(2,003,565)	(1,680,119)
NET CURRENT ASSETS		2,175,867	1,979,132
TOTAL ASSETS LESS CURRENT LIABILITIES		6,985,900	5,794,360

	Notes	2007 RMB'000	2006 RMB'000
NON-CURRENT LIABILITIES			
Interest-bearing bank loans	27	(1,417,000)	(1,607,027)
Long term payables	30	(95,628)	(93,994)
Deferred tax liabilities	21	(184,711)	(247,050)
Senior guaranteed notes	31	(1,435,118)	(1,526,806)
Senior notes	31	(897,179)	—
Derivative financial instruments designated as hedging instruments	35	(88,189)	—
Total non-current liabilities		(4,117,825)	(3,474,877)
NET ASSETS		2,868,075	2,319,483
EQUITY			
Equity attributable to equity holders of the parent			
Issued capital	37	57,925	57,436
Reserves	39(a)	2,731,126	2,170,151
		2,789,051	2,227,587
Minority interests		79,024	91,896
TOTAL EQUITY		2,868,075	2,319,483

4. REVENUES AND OTHER OPERATING REVENUES

Revenues

Revenues, which are also the Group's turnover, represent the net amount received and receivable for the goods sold by the Group to outside customers, less returns and allowances, commissions from concessionaire sales, consultancy and management service fees, and rental income. An analysis of revenues is presented below:

	2007 RMB'000	2006 RMB'000
Sale of goods – direct sales	1,044,130	758,049
Commissions from concessionaire sales (note)	1,511,498	1,027,122
Consultancy and management service fees	32,558	41,681
Rental income	138,797	115,153
	<u>2,726,983</u>	<u>1,942,005</u>

Note:

The commissions from concessionaire sales are analysed as follows:

	2007 RMB'000	2006 RMB'000
Gross revenue from concessionaire sales	<u>7,455,218</u>	<u>5,011,806</u>
Commissions from concessionaire sales	<u>1,511,498</u>	<u>1,027,122</u>

Over 90% of the Group's turnover and contribution to the operating profit is attributable to the operation and management of department stores and over 90% of the Group's turnover and contribution to the operating profit is attributable to customers in the PRC and over 90% of the Group's operating assets are located in the PRC. Accordingly, no analysis of segment information is presented.

37. SHARE CAPITAL

	Number of ordinary shares '000	Nominal value	
		HK\$'000	RMB'000
Authorised:			
Ordinary shares of HK 0.1 each	1,500,000	150,000	156,000
Issued and fully paid:			
At 1 January 2007	552,000	55,200	57,436
Share options exercised (note)	5,219	522	489
At 31 December 2007	557,219	55,722	57,925

Note:

During the year, 5,218,900 share options were exercised for the same amount of shares at HK\$36.75 per share. This gives rise to net proceeds from issue of shares amounting to approximately HK\$192 million (equivalent to approximately RMB185,803,000). The share options were granted under an employee share option scheme disclosed in note 38 to the financial statements.

38. EMPLOYEE SHARE-BASED ARRANGEMENTS

On 10 January 2007, a total of 8,188,950 share options were granted to 482 eligible employees, including directors and the chief executive, of the Company at nil consideration and with an exercise price of HK\$36.75 per share pursuant to an employee share option scheme (the "Scheme").

The fair value of the share options granted during the year was RMB25,442,000 and the Group recognised share option expenses of RMB25,442,000 during the year ended 31 December 2007.

The fair value of the options granted is estimated at the date of grant using a Black-Scholes-Merton option pricing model, taking into account the terms and conditions upon which the options were granted. The 5,955,600 share options granted under Lot 1 are exercisable from 24 January 2007 to 23 January 2010 and have no other vesting conditions. The 2,233,350 share options granted under Lot 2 are exercisable from 2 January 2008 to 1 January 2011 and required an employee service period until 2 January 2008.



Gross Sales Proceeds rose to RMB
銷售所得款項總額上升至人民幣

14,106
MILLION 百萬元

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balance of approximately 7.7% came from the Groceries and Perishables category.

The merchandise gross margin (a combination of the concessionaire commission and the direct sales margin) was flat at 19.0% due to lower merchandise margin for new stores opened in the past 15 months. However on a same store basis, the merchandise gross margin improved by 0.1% as the improved market condition and consumer sentiment enable the Group to continue scaling down its discount activities.

Total operating revenues for the year grew by RMB491.4 million or 12.6% to RMB4,400.1 million. The growth rate of operating revenues was lower than the growth rate of the total gross sales proceeds due to the lower growth rate of direct sales and rental incomes as well as the negative growth of the management and consultancy fees in line with the reduction on the number of managed stores.

器類別亦佔約7.2%，餘下約7.7%則是食品與鮮貨類別。

因過往15個月開設的新店，銷售毛利率較低，導致商品銷售總額利潤率（綜合特許專櫃銷售傭金及直接銷售的利潤率）持平於19.0%。但伴隨經濟及消費者信心的逐漸恢復，本集團繼續縮減其折扣活動，因此同店對比下，商品銷售總額利潤率取得0.1%的增長。

本集團的經營收益總額較去年同期增加人民幣491,400,000元或12.6%至人民幣4,400,100,000元。這是由於較低特許專櫃銷售傭金率及因管理店的減少而消滅的諮詢及管理費，導致經營收益總額增長率低於合計銷售所得款項總額的增長率。