Table of Contents

Financial Statement Analysis (FSA)

Teacher: Nut Khorn

Course Description

This course is an introduction to financial statement analysis, aiming to provide you the basic skills and techniques to analyze financial statements for the purpose of valuation. You will learn how to evaluate financial statements and perform prospective, credit, and equity analyses. Students will also learn how to recast and adjust financial statements to obtain a better estimate of earning power. Last, valuation models will be applied to estimate the intrinsic value of the firm.

Course Objectives

This course is designed to prepare you to interpret and analyze financial statements effectively. This course explores in greater depth financial reporting topics introduced in the core course in financial accounting and also examines additional topics not covered in that course. The viewpoint is that of the user of financial statements. This course is designed primarily for students who expect to be intensive users of financial statements as part of their professional responsibilities.
The pre-requisites for this course are the core course in financial accounting and the core course in managerial accounting.

The goal of this course is to better equip students with the skills needed to perform financial restatement and interpret financial statements properly. Further, the subject aims to provide the prerequisite knowledge that will enable students to perform critical analysis on a firm performance. The course best suits the following students (but not limited to):

Those who aspire to be a financial analyst.

Those who aspire to pursue advanced study in financial economics/accounting.

Those who want to understand the inter-disciplinary concepts among accounting, economics, and finance.

Course Intended Learning Outcomes (CILOs)

By the end of the course, students should be able to:

CILO01 Construct the basic skills needed to perform financial restatement and interpret financial statements properly.

CILO02 Develop the prerequisite knowledge to perform critical analysis on a firm performance.

Alignment of program ILOs and course ILOs

Program ILOs	Course ILOs
Acquisition and internalization of knowledge of economics & finance	CILO01, CILO02
Application and integration of knowledge	CILO01, CILO02
Developing global outlook	CILO01, CILO02
Mastering communication skills	CILO02
Inculcating leadership	CILO02

Course Prerequisite

Introduction to Accounting (BUSI1002) is a prerequisite. For those who are rusty on accounting concepts, you are strongly recommended to review materials taught in your Introduction to Accounting course. Knowledge on Corporate Finance (FINA1003) is essential for performing valuation analysis. Students are expected to be familiar with concepts of time value of money (e.g., present value, future value, PV of annuity, and amortization schedule), basic asset pricing models (e.g., CAPM), and cost of capital (e.g., Weighted Average Cost of Capital). Advanced knowledge of accounting will be a big plus, e.g., Intermediate Accounting I&II (BUSI0019 & BUSI0020). The workload is demanding and students are expected to spend more than 10 hours per week on this course.

Required Textbook

Subramanyam and Wild (**SW**), Financial Statement Analysis, 10th International Edition, McGraw-Hill/Irwin, New York, 2009.

Reference Books

J.R. Williams, S.F. Haka, M.S. Bettner, J.V. Carcello (**WHBC**), Financial Accounting, 13th edition, 2008, McGraw-Hill International Edition.

White, Sondhi, and Fried (**WSF**), *The Analysis and Use of Financial Statements*, 3rd edition, 2003

Book for fun

The Intelligent Investor: The Definitive Book on Value Investing. A Book of Practical Counsel by Benjamin Graham, Jason Zweig, and Warren Buffet

Course Materials

- The readings, problems, and cases for the course come from Financial Reporting and Statement Analysis: A Strategic Perspective, 5th edition, by Clyde Stickney, Paul R. Brown, and James Wahlen.
- We will also be using the Dell Computer 2005 10-K filing during the class. For a pdf printable and downloadable file, go to:

http://www.dell.com/downloads/global/corporate/sec/10k-fy05.pdf

Please bring both to class as we will be using them throughout the semester.

Three internet addresses may prove useful to you at some point in the course:

1. Filings with the Securities and Exchange Commission: **http://www.sec.gov**
2. Pronouncements of the Financial Accounting Standards Board: **http://www.fasb.org**
3. Pronouncements of the International Accounting Standards Committee: **http://www.iasc.org.uk**
4. My Web Blog: **www.nutkhorn.wordpress.com**

Table of Contents

Chapter 1: Overview of Financial Statement Analysis

Chapter 2: Financial Reporting and Analysis

Chapter 3: Analyzing Financing Activities

Chapter 4: Analyzing Investing Activities

Chapter 5: Analyzing Investing Activities: Interoperate Investments

Chapter 6: Analyzing Operating Activities

Chapter 7: Cash Flow Analysis

Chapter 8: Return on Invested Capital and Profitability Analysis

Chapter 9: Prospective Analysis

Chapter 10: Credit Analysis

Chapter 11: Equity Analysis and Valuation

Comprehensive Case: Applying Financial Statement Analysis

Appendix A: Financial Statements

- Colgate Palmolive Co.
- Campbell Soup

Interest Tables

References

COURSE REQUIREMENT

Student must have basic knowledge of Business mathematics, statistics, business, Accounting Principles, Financial Accounting, corporate finance, investment, financial management, economics and so on.

EVALUATION OF THE STUDENT PERFORMANCE

Course assessment:

Attendance and participation…………….	*10 %*
Home work…………….	*20%*
Assignment……………......................	*30 %*
Mid-term Exam……………	*20%*
Final Examination …………..	*20 %*
Total: …………..	*100%*

COURSE DURATION

The duration of this course will take approximately one month and one week or forty-eight (48) hours to complete. Formal class room lectures/ discussion lasting 15 hours will be conducted once a week.

EVALUATION OF STUDENT PERFORMANCE

Beside formal classroom lectures and theoretical discussions, the students will also be introduced to *class Self-study questions, questions, exercises, problems, and case-*

study and discussion that will provide them with a more comprehensive learning package in this course.

It is expected that formal class discussions will provide the conceptual and knowledge-oriented learning, while the class exercises and case study will provide students the experiential, development and sharpening of their managerial skills. Through this process, students can become more involved in the learning process. It is therefore essential that students participate actively in class discussions and during the Q & A group case study presentations. The class exercises and case study are generally action oriented in that individuals or groups of students investigate a situation, develop conclusions, and/or recommendations, and present their ideas/views to their class colleagues.

Work Requirement for a financial statement Analysis Major under Mr. Nut Khorn

- I will apply the international standard when I teach all accounting courses I will require that you do all the assigned work before class:

  Read your textbook (slide presentation is not complete)
  Read the power point materials
  Do the assignments
  Prepare for all examinations.
  Internet research work.
- To perform well in my courses, you need to spend about a minimum of **15 hours per week for this class**. If you do not want to make this commitment, then do not take my courses.
- You should be present in all my classes. If you do not show up for my lectures, I will consider you as absent (no need to give excuses).
- If you fail any of my courses (I hope you won't), you must retake a new written examination plus an oral examination to prove that you know the subjects.

HOME WORK AND ASSIGNMENT

Students **MUST COMPLY STRICTLY** with the following **instructions** in writing their Home Work, Individual Assignments, Group Case-study and Group Case-Study Presentation.

1. The student(s) **is expected** to do his/her own research in order to write up individual assignments and home work.
2. All Individual Assignments/Home work and Group Case-Study **MUST be type written on A-4 sized paper** with adequate margins. **You should include a TITLE PAGE and a LIST OF CONTENTS.**
3. Use headings and sub-headings to organize your report, including supporting material(s) as attachments.
4. All reference books/published materials you refer to should be properly referenced (arrange in this order: ***name of author(s), year, and title of the book, publisher, and the country the book was published)*** and this **must** be included in a bibliography at the end of the assignment.
5. Use **text referencing** when you **cite somebody else's work** from your references. ***Citation may mean direct quoting, or paraphrasing, or summarizing, or simply to make a statement of that author's view of finding.*** An example of text referencing:

Beamer and Varner (2001), suggested that culture is not something we are born with, but rather it is learned.
6. **Number all pages** sequentially and securely staple and/or bind all sheets together.
Schedule of Class Meetings and Assignments

Date	Chapter	Topic	Class Preparation and Home work Assignments
Dec 13,2010	**Ch01**	1) Benefit of Financial Statements by using FRT of MEF of Cambodia in my Web Blog. **2) Use** Annual Report of Best Buy –A4-A5 and Apple – A25-A26 Financial Report and then comparison in each company in **my Web Blog to analyze CONSOLIDATED STATEMENTS OF EARNINGS and CONSOLIDATED BALANCE SHEETS, Common-size Financial Statements and Ratios Analysis.**	**Group Assignments = 4 students**
	Ch01	**P1-5, P1-11, P1-13**	**Home Work**
	Ch02	**P2-114, P2-122**	**Home Work**
	Ch 03		
	Ch04		

<u>Teaching and Learning Activities (TLA)</u>

Teaching and Learning Activities (TLA) TLA1	Lecture	Instructor will give lectures on major concepts and issues.
TLA2	tutorial discussion	Students are expected to engage in discussion during lecture and tutorial meetings. Most in-depth learning takes place when students actively engage themselves in discussions thought presenting and sharing their ideas
TLA3	Consultation	Both instructor and teaching assistant hold weekly consultation hours to answer students' questions.

<u>Alignment Among Course Intended Learning Outcome, Teaching and Learning Activities and Assessment Tasks</u>

Learning Outcome	Teaching and learning activity (TLA)	Assessment Task
CILO01	TLA1, TLA2, TLA3	Homework, tutorial participation, case discussion, Mid-term Test, Exam
CILO02	TLA1, TLA2, TLA3	Homework, tutorial participation, case discussion, Mid-term Test, Exam

Standards of Assessment

Grade	Grade Definition	Description
A+, A. A-	High distinction 80%-100%	Strong evidence of superb ability to fulfill the intended learning outcomes of the course at all levels of learning: describe, apply, evaluate, and synthesis.
B+, B, B-	Distinction 70%-79%	Strong evidence of the ability tofulfill the intended learning outcomes of the course at all levels of learning: describe, apply, evaluate, and synthesis.
C+, C, C-	Credit pass 60%-69%	Evidence of adequate ability to fulfill the intended learning outcomes of the course at low levels of learning such as describe and apply but not at high levels of learning such as evaluate and synthesis
D	Pass 50%-59%	Evidence of basic familiarity with the subject.
F	Fail <50%	Little evidence of basic familiarity with the subject.

Assignments

- Readings, cases and/or problems are assigned for each class. You should come to class prepared to discuss your analysis of the cases and problems. Regular class participation is important to the learning process for you and your classmates.
- Ten percent of your grade will be based on "class preparation." You can receive these points either from actively discussing the cases and problems in class or handing in the assignment at the end of the class. No late assignments will be accepted nor will I accept e-mailed or faxed assignments. If you choose to hand in the assignment, please make two copies – one for you and one for me.
- All assignments should be prepared using word processing software with type size no smaller than 12 point. You can include tables or spreadsheets as well, as long as they are carefully labeled and defined. During class discussions, please feel free to make changes to your solutions, but do so in a way that clearly indicates that they are the result of class discussion (e.g., using a different color of ink).
- You may work in groups to discuss homework assignments. However, each person should prepare his/her own individual homework solutions to be submitted. Ideally, you should work through each day's assignment on

your own before discussion it with anyone. You can then make changes to your solution based on your learning in any discussion. Interpretations of the analysis should be in your own words.

- Additional assignments either will be discussed in class or are extra problems for your benefit. I will tell you the assignments that will be discussed in class prior to that class.

Financial Statement Analysis Package

A financial statement analysis package (FSAP) is available to ease the calculation of financial ratios and perform other analyses. Access FSAP and the user manual at http://www.swlearning.com

Course Outline for Financial Statement Analysis

Teaching Weeks	Chapters	Topics	Due Dates	Time Allowed
Week 1	Ch 01	Overview of Financial Statement Analysis	Dec 13, 2010	15 Hrs
Week 2	Ch 02	Earnings and Cash Flow Analysis		15 hrs
	Mid-term Examination			
Week 3	Ch03	Credit Analysis		15 Hrs
Week 4	Ch04	FRT for SMEs of MEF		
	Final Examination			

Related Web Addresses

Filings with the Securities and Exchange Commission:
www.sec.gov (click on “Edgar Data Base”)
Pronouncement of the Financial Accounting Standards Board (FASB):
www.fasb.org
Pronouncement of the International Accounting Standards Committee
www.iasc.org.uk
Professional Announcements and membership info for CPAs:
www.aicpa.org
Financial Data and current business news:
www.hoovers.com (for about 10,000 company’s financial and nonfinancial info)
www.disclosure.com,
www.fortune.com,
www.cnnfn.com

Chapter 01: Overview Analysis of Financial Statements

Learning Objectives

1. Organize a systematic financial ratio analysis using common-size financial statements and the DuPont framework.
2. Recognize the potential impact that differing accounting methods can have on the financial ratios of otherwise essentially identical companies.
3. Understand how foreign companies report their financial results to U.S. investors.
4. Describe the purpose and format of the SEC's Form 20-F.
5. Convert foreign currency financial statements into U.S. dollars using the translation method.
6. Incorporate material from the entire text into the preparation of a statement of cash flows.

Review Points: A manager should be able to understand what the information is telling him. If he doesn't understand it, he will not use it to make a decision. If he misunderstands it, he might make a bad decision.
Information is provided to management to assist them with planning, controlling and decision making. Management decision is likely to be better when they are provided with better quality information.

A GOOD ANALYSIS REPORT CONSISTS OF 6 SECTIONS:

1. **Executive summary- the executive summary is brief and focuses on important analysis results and conclusions**
2. **Analysis overview- background material on the company- its industry, and its economic environment.**
3. **Evidential matter- financial statements and information used in the analysis. This includes ratios, trends, comparisons, statistics and all analytical measures assembled. Often organized under the building blocks of analysis.**
4. **Assumptions- identification of important assumptions for estimates.**
5. **Important factors- listing of important favorable and unfavorable factors, both quantitative and qualitative, for company performance- usually listed by areas of analysis.**
6. **Inferences- includes forecasts, estimates, interpretations and conclusions drawing on all sections of the report.**

MICROSOFT NDQ-MSFT

RECENT PRICE 24.70 | P/E RATIO 19.6 (Trailing: 20.6 / Median: 32.0) | RELATIVE P/E RATIO 1.11 | DIV'D YLD 1.5% | VALUE LINE

TIMELINESS 3 Lowered 7/30/04
SAFETY 1 Raised 5/26/06
TECHNICAL 3 Raised 7/21/06
BETA 1.05 (1.00 = Market)

2009-11 PROJECTIONS

	Price	Gain	Ann'l Total Return
High	60	(+145%)	26%
Low	50	(+100%)	20%

Insider Decisions

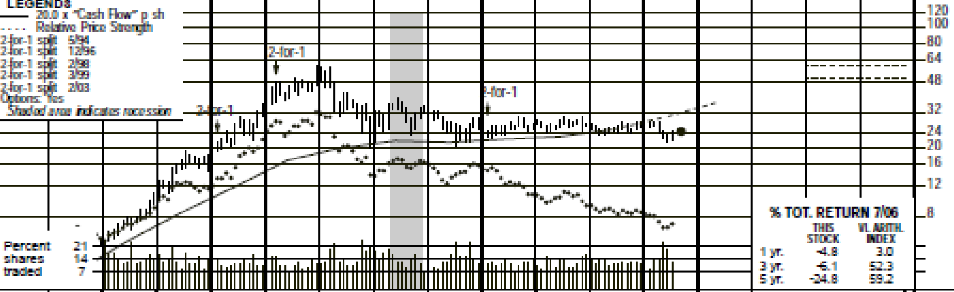
	O	N	D	J	F	M	A	M	J
to Buy	0	0	0	0	0	0	0	0	0
Options	0	4	2	2	2	2	0	0	0
to Sell	0	7	1	2	4	2	0	1	0

Institutional Decisions

	3Q2005	4Q2005	1Q2006
to Buy	793	689	616
to Sell	622	759	824
Hld's(000)	5783079566750545808005		

	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
High:	6.8	10.8	18.8	36.0	60.0	58.6	38.1	35.3	30.0	30.2	28.3	28.4
Low:	3.6	5.0	10.1	15.5	34.0	20.1	21.4	20.7	22.5	24.0	23.8	21.5

LEGENDS
— 20.0 x "Cash Flow" p sh
.... Relative Price Strength
2-for-1 split 5/94
2-for-1 split 12/96
2-for-1 split 2/98
2-for-1 split 3/99
2-for-1 split 2/03
Options: Yes
Shaded area indicates recession



% TOT. RETURN 7/06

	THIS STOCK	VL ARITH. INDEX
1 yr.	-4.8	3.0
3 yr.	-6.1	52.3
5 yr.	-24.8	59.2

1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	© VALUE LINE PUB., INC.	09-11
.14	.22	.32	.42	.50	.63	.92	1.18	1.47	1.93	2.25	2.39	2.65	3.00	3.39	3.72	4.40	5.40	Sales per sh A	8.15
.04	.06	.09	.12	.16	.18	.28	.41	.59	.84	.99	1.09	1.07	1.12	1.15	1.27	1.50	1.85	"Cash Flow" per sh	2.85
.03	.05	.08	.10	.12	.15	.21	.33	.45	.70	.85	.90	.94	.97	1.04	1.16	1.20	1.45	Earnings per sh B	2.25
--	--	--	--	--	--	--	--	--	--	--	--	--	.08	.16	.32	.34	.45	Div'ds Decl'd per sh E■	.70
.02	.03	.04	.03	.03	.05	.05	.05	.07	.06	.09	.10	.07	.08	.10	.08	.15	.20	Cap'l Spending per sh	.30
.11	.16	.25	.36	.48	.57	.73	1.02	1.58	2.69	4.05	4.48	4.87	5.69	6.89	4.49	4.00	4.55	Book Value per sh D	6.90
8186.3	8363.2	8708.4	9024.0	9296.0	9408.0	9408.0	9632.0	9880.0	10218	10218	10566	10718	10718	10862	10710	10062	9300	Common Shs Outst'g C	8000
19.9	22.6	28.5	26.8	21.4	28.2	29.1	33.0	42.8	49.8	53.1	35.3	32.4	26.1	25.8	22.9	21.7		Avg Ann'l P/E Ratio	25.0
1.48	1.44	1.73	1.58	1.40	1.89	1.82	1.90	2.23	2.84	3.45	1.81	1.77	1.49	1.36	1.21	1.14		Relative P/E Ratio	1.65
--	--	--	--	--	--	--	--	--	--	--	--	--	.3%	.6%	1.2%	1.3%		Avg Ann'l Div'd Yield	1.3%

CAPITAL STRUCTURE as of 6/30/06

Total Debt None

Leases, Uncapitalized $230.0 mill.

No defined benefit pension plan.

Pfd Stock None
Common Stock 10,062,000,000 shs.

Options Exercisable 6.6%
MARKET CAP: $249 billion (Large Cap)

1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007		09-11
8671.0	11358	14484	19747	22956	25296	28365	32187	36835	39788	44282	50000	Sales ($mill) A	65000
41.0%	50.1%	55.0%	56.0%	51.3%	52.4%	45.8%	48.0%	40.6%	44.0%	39.0%	40.5%	Operating Margin	42.0%
480.0	557.0	1024.0	1010.0	748.0	1536.0	1084.0	1439.0	1186.0	855.0	903.0	1125	Depreciation ($mill)	1825
2176.0	3454.0	4786.0	7625.0	9421.0	10003	10384	10526	11330	12715	12599	14335	Net Profit ($mill)	19185
35.0%	35.0%	35.4%	35.0%	34.0%	33.5%	32.0%	32.2%	33.1%	32.0%	31.0%	30.5%	Income Tax Rate	30.5%
25.1%	30.4%	33.0%	38.6%	41.0%	39.5%	36.6%	32.7%	30.8%	32.0%	28.5%	28.7%	Net Profit Margin	29.5%
5414.0	6763.0	10159	11515	20653	28506	35832	44999	55597	31860	26568	29520	Working Cap'l ($mill)	44115
--	--	--	--	--	--	--	--	--	--	--	Nil	Long-Term Debt ($mill)	Nil
6908.0	10777	16627	28438	41368	47289	52180	61020	74825	48115	40104	42495	Shr. Equity ($mill) D	55010
6908.0	10777	16627	28438	41368	47289	52180	61020	74825	48115	40104	42495	Shr. Equity ($mill) D	55010
31.5%	32.0%	28.8%	26.8%	22.8%	21.2%	19.9%	17.3%	15.1%	26.4%	31.4%	33.5%	Return on Total Cap'l	35.0%
31.5%	32.0%	28.8%	26.8%	22.8%	21.2%	19.9%	17.3%	15.1%	26.4%	31.4%	33.5%	Return on Shr. Equity	35.0%
31.5%	35.1%	30.4%	27.7%	22.7%	21.2%	19.9%	15.8%	12.8%	19.2%	22.5%	23.5%	Retained to Com Eq	24.0%
--	--	1%	--	--	--	--	8%	15%	27%	28%	31%	All Div'ds to Net Prof	31%

CURRENT POSITION ($MILL.)	2004	2005	6/30/06
Cash Assets	60592	37751	34161
Receivables	5890	7180	9316
Inventory (Avg Cst)	421	491	1478
Other	3663	3315	4055
Current Assets	70566	48737	49010
Accts Payable	1717	2086	2909
Debt Due	--	--	--
Other	13252	14791	19533
Current Liab.	14969	16877	22442

ANNUAL RATES of change (per sh)	Past 10 Yrs.	Past 5 Yrs.	Est'd '03-'05 to '09-'11
Sales	20.5%	12.5%	16.0%
"Cash Flow"	22.5%	8.0%	16.0%
Earnings	24.0%	10.0%	13.5%
Dividends	--	--	24.5%
Book Value	28.5%	15.5%	3.5%

Fiscal Year Ends	QUARTERLY SALES ($ mill.) A Sep.30	Dec.31	Mar.31	Jun.30	Full Fiscal Year
2003	7746	8541	7835	8065	32187
2004	8215	10153	9175	9292	36835
2005	9189	10818	9620	10161	39788
2006	9741	11837	10900	11804	44282
2007	10700	13300	12400	13600	50000

Fiscal Year Ends	EARNINGS PER SHARE A B Sep.30	Dec.31	Mar.31	Jun.30	Full Fiscal Year
2003	.25	.24	.26	.22	.97
2004	.24	.28	.29	.23	1.04
2005	.23	.32	.28	.33	1.16
2006	.29	.34	.29	.28	1.20
2007	.31	.38	.36	.40	1.45

Cal-endar	QUARTERLY DIVIDENDS PAID E■ Mar.31	Jun.30	Sep.30	Dec.31	Full Year
2002	--	--	--	--	--
2003	.08	--	--	.16	.24
2004	--	--	.08	.08	.16
2005	.08	.08	.08	.08	.32
2006	.09	.09			

BUSINESS: Microsoft Corp. is the largest independent maker of software. It develops and sells software products for a wide range of computing devices. Also sells the Xbox video game console. Revenue sources in fiscal 2006: Client, 29.8% of total; Information Worker, 26.6%; Server, 25.9%; Home and Entertainment, 9.6%; MSN (Microsoft Network), 5.2%; Business Solutions, 2.1%; Mobile and Embedded, .8%. R & D: 14.9% of sales. 2005 depreciation rate: 13.4%. Has 61,000 employees. William H. Gates owns 9.6% of stock, other officers & directors 4.2% (9/05 proxy). Chairman: William H. Gates. CEO: Steven A. Ballmer. Inc.: WA. Address: One Microsoft Way, Redmond, WA 98052-6399. Telephone: 425-882-8080. Internet: www.microsoft.com.

Microsoft continues to have trouble placating European regulators. In July, EU authorities hit Microsoft with a fine of over $355 million alleging that the company had not complied with orders to make it easier for rivals to tailor their software to mesh with Microsoft's products. Furthermore, regulators may impose additional fines if they feel Microsoft hasn't complied with their requirements. The authorities also intend to closely scrutinize the upcoming revamps of the *Windows* operating system and *Office* suite of products to be sure they don't unfairly hinder competition. Microsoft has appealed the fine, and the original 2004 decision.

Microsoft is returning more cash to shareholders. In July, the company announced a tender offer for up to $20 billion of its stock (the offer expired August 17th), which will probably boost share net by five to six cents in fiscal 2007, and a further authorization to repurchase up to $20 billion of stock by June 30, 2011. That's on top of a $30 billion buyback program that was completed in July.

Meanwhile, operations are looking good. Strong demand for new products, such as the *Xbox 360* video game console, *SQL Server 2005*, and *Visual Studio 2005*, spurred revenue growth in fiscal 2006, and upcoming offerings, such as *Windows Vista* and *Microsoft Office 2007*, should fuel good revenue gains this year. What's more, the company plans to introduce a family of digital music and video players and related software products that will compete with Apple's hot-selling iPod. Margins will be squeezed in the first half of fiscal 2007 by sales of *Xbox 360s*, which won't be profitable until the line matures, and costs associated with online services and in preparing for the launch of *Windows Vista* and *Office 2007*. The company also is investing in the salesforce, and in developing new products and services, which will be a plus in the long term, but will pressure margins this year. Still, we look for the good flow of new products to push earnings up to $1.45 this year and to the $2.00-$2.50 range by 2009-2011.

Microsoft shares are worth a look. The issue is ranked to only move with the market in the year ahead, but has good 3- to 5-year appreciation potential.

George A. Niemond *August 25, 2006*

(A) Fiscal year ends June 30th. (B) Primary earnings through fiscal '97, then diluted. Excludes nonrecurring losses: '98, 3¢; '01, 23¢; '02, 23¢; '03, 5¢; '04, 29¢; '05, 4¢; gain: '99, 1¢; accounting charge, '01, 3¢. Next earnings report due late Oct. (C) In millions, adjusted for stock splits. (D) Includes intangibles. In 2005: $3.8 billion, 36¢ a share. (E) Dividends historically paid in early March, June, Sept., and Dec. ■ Dividend reinvestment plan available. Special dividend of $3.00 a share paid December 2, 2004.

Company's Financial Strength	A++
Stock's Price Stability	80
Price Growth Persistence	35
Earnings Predictability	95

Chapter Preview

This chapter shows how to use information in financial statements to evaluate a company's performance and condition. We describe the purpose of financial statement analysis, its basis building block, the information available, standards for comparisons, and tools of analysis. The chapter emphasizes three major analysis tools: horizontal analysis, vertical analysis, and ratio analysis.

Analysis of Financial Statements

Basics of Analysis
- Purpose
- Building Blocks
- Information
- Standards for Comparisons
- Tools

Horizontal Analysis
- Comparative Balance Sheet
- Comparative Income statements
- Trend analysis

Vertical Analysis
- Common-size Balance Sheet
- Common- size income statement
- Common-size graphics

Ratio Analysis
- Liquidity and efficiency
- Solvency
- Profitability
- Market prospects
- Ratio Summary

Building Blocks of Analysis

- **Liquidity and Efficiency:** Ability to meet short-term obligations and to efficiently generate revenues.
- **Solvency:** Ability to generate future revenues and meet long-term obligations.
- **Profitability:** Ability to provide financial rewards sufficient to attract and retain financing.
- **Market Prospects:** Ability to generate positive market expectations.

Framework for Financial Statement Analysis

- **Financial Statement Analysis** is the examination of both the relationships among financial statement numbers and the trends of those numbers over time. Financial Statement Analysis will help business owners and other interested people to analyse the data in financial statements to provide them with better information about such key factors for decision making and ultimate business survival.

- Financial statement analysis involves analysing the information provided in the financial statements to:
  -Provide information about the organisation's:
    - Past performance
    - Present condition
    - Future performance

  -Assess the organisation's:
    - Earnings in terms of power, persistence, quality and growth
    - Solvency

Purpose:

- To use financial statements to evaluate an organisation's
  – Financial performance
  – Financial position.
- To have a means of comparative analysis across time in terms of:
  – Intracompany basis (within the company itself)
  – Intercompany basis (between companies)
  – Industry Averages (against that particular industry's averages)
- To apply analytical tools and techniques to financial statements to obtain useful information to aid decision making.
- The purpose of financial statement analysis for these users is to provide strategic information to improve company efficiency and effectiveness in providing products and services.
- The common goal of these users is evaluate company performance and financial condition. This includes evaluating *(1) past and current performance, (2) current financial position, and (3) future performance and risk.*

All financial statements are essentially historical documents. They tell what has happened during a particular period of time. However, most users of financial statements are concerned about what will happen in the future. Stockholders are concerned with future earnings and dividends. Creditors are concerned with the company's future ability to repay its debts. Managers are concerned with company's ability to finance future expansion. Despite the fact that financial statements are historical documents, they can still provide valuable information bearing on all of these concerns.

Financial statement analysis *involves careful selection of data from financial statements for the primary purpose of forecasting the financial health of the company. This is accomplished by examining trends in key financial data, comparing financial data across companies, and analyzing key financial ratios.*

Business Survival:
There are two key factors for business survival:

- Profitability
- Solvency

  -Profitability is important if the business is to generate revenue (income) in excess of the expenses incurred in operating that business.
  -The solvency of a business is important because it looks at the ability of the business in meeting its financial obligations.

Effective Financial Statement Analysis

- To perform an effective financial statement analysis, you need to be aware of the organisation's:
  - business strategy
  - objectives
  - Annual report and other documents like articles about the organisation in newspapers and business reviews.

  These are called individual organisational factors.

  Requires that you:
  - Understand the nature of the industry in which the organisation works. This is an industry factor.
  - Understand that the overall state of the economy may also have an impact on the performance of the organisation.

  Financial statement analysis is more than just "crunching numbers"; it involves obtaining a broader picture of the organisation in order to evaluate appropriately how that organisation is performing

Limitations of Financial Statement Analysis

- We must be careful with financial statement analysis.
  -Strong financial statement analysis does not necessarily mean that the organisation has a strong financial future.
  -Financial statement analysis might look good but there may be other factors that can cause an organisation to collapse.

Major Tools Include

- **Common-Size Financial Statements**
- **Ratio Analysis**
- The APB stated that comparisons between financial statements are most informative—
  1. When the presentations are in good form.
  2. When the content of the statements is identical.
  3. When accounting principles are not changed, or, if they are changed, the financial effects of the changes are disclosed.
  4. When changes in circumstances or in the nature of the underlying transactions are disclosed.

Common-Size Financial Statements: Analysis of a company's single-year financial statements. Financial statements are standardized by a measure of size, either sales or total assets. All amounts are stated in terms of a percentage of the size measure.

- **Ratio Analysis:** Analysis of a company's financial statements by computing ratios and comparing them against both trends and industry averages. Financial ratio analysis involves calculating and analysing ratios that use data from one, two or more financial statements.

- Ratio analysis also expresses relationships between different financial statements.
- Financial Ratios can be classified into 5 main categories:
  - Profitability Ratios
  - Liquidity or Short-Term Solvency ratios
  - Asset Management or Activity Ratios
  - Financial Structure or Capitalisation Ratios
  - Market Test Ratios

The commonly used tools for financial statement analysis are:

- Financial Ratio Analysis
- Comparative financial statements analysis:
  - Horizontal analysis/Trend analysis
  - Vertical analysis/Common size analysis/ Component Percentages

---

<u>Horizontal Analysis</u>

What is horizontal analysis?

It's an analysis of the percentage increases and decreases of related items in comparative financial statements.

A technique for analyzing financial statements that involves the computation of changes in both dollar amounts and percentage from the previous to the current year.

Amount dollar changes = Analyzing period amount – Base period amount

$$\textbf{\textit{Percentage changes}} = \frac{Amount\ dollar\ changes}{Base\ period\ amount} \times 100$$

Lincoln Company
Comparative Balance Sheet
December 31, 2006 and 2005

Assets	2006	2005	Increase (Decrease) Amount	Percent
Current assets	$ 550,000	$ 533,000	$ 17,000	3.2%
Long-term investments	95,000	177,500	(82,500)	(46.5%)
Fixed assets (net)	444,500	470,000	(25,500)	(5.4%)
Intangible assets	50,000	50,000	—	
Total assets	$1,139,500	$1,230,500	$ (91,000)	(7.4%)
Liabilities				
Current liabilities	$ 210,000	$ 243,000	$ (33,000)	(13.6%)
Long-term liabilities	100,000	200,000	(100,000)	(50.0%)
Total liabilities	$ 310,000	$ 443,000	$(133,000)	(30.0%)
Stockholders' Equity				
Preferred 6% stock, $100 par	$ 150,000	$ 150,000	—	
Common stock, $10 par	500,000	500,000	—	
Retained earnings	179,500	137,500	$42,000	30.5%
Total stockholders' equity	$ 829,500	$ 787,500	$42,000	5.3%
Total liab. & SE	$1,139,500	$1230,500	$(91,000)	(7.4%)

Lincoln Company
Comparative Income Statement
December 31, 2006 and 2005

	2006	2005	Increase (Decrease) Amount	Percent
Sales	$1,530,500	$1,234,000	$296,500	24.0%
Sales returns	32,500	34,000	(1,500)	(4.4%)
Net sales	$1,498,000	$1,200,000	$298,000	
Cost of goods sold	1,043,000	820,000	223,000	
Gross profit	$ 455,000	$ 380,000	$ 75,000	
Selling expenses	$ 191,000	$ 147,000	$ 44,000	
Administrative expenses	104,000	97,400	6,600	
Total operating expenses	$ 295,000	$ 244,400	$ 50,600	
Operating income	$ 160,000	$ 135,600	$ 24,400	
Other income	8,500	11,000	(2,500)	
	$ 168,500	$ 146,600	$ 21,900	
Other expense	6,000	12,000	(6,000)	
Income before income tax	$ 162,500	$ 134,600	$ 27,900	
Income tax	71,500	58,100	13,400	
Net income	$ 91,000	$ 76,500	$ 14,500	

Vertical Analysis

A percentage analysis can be used to show the relationship of each component to a total within a single statement.

The total, or 100% item, on the balance sheet is "total assets."

Lincoln Company
Comparative Balance Sheet

	December 31, 2006		December 31, 2005	
Assets	Amount	Percent	Amount	Percent
Current assets	$ 550,000	48.3%	$ 533,000	43.3%
Long-term investments	95,000	8.3	177,500	14.4
Property, plant, & equip. (net)	444,500	39.0	470,000	38.2
Intangible assets	50,000	4.4	50,000	4.1
Total assets	$1,139,500	100.0%	$1,230,500	100.0%
Liabilities				
Current liabilities	$ 210,000	18.4%	$ 243,000	19.7%
Long-term liabilities	100,000	8.8	200,000	16.3
Total liabilities	$ 310,000	27.2%	$ 443,000	36.0%
Stockholders' Equity				
Preferred 6% stock, $100 par	$ 150,000	13.2%	$ 150,000	12.2%
Common stock, $10 par	500,000	43.9	500,000	40.6
Retained earnings	179,500	15.7	137,500	11.2
Total stockholders' equity	$ 829,500	72.8%	$ 787,500	64.0%
Total liab. & SE	$1,139,500	100.0%	$1,230,500	100.0%

Lincoln Company
Comparative Income Statement
For the Years Ended December 31, 2006 and 2005

	2006		2005	
	Amount	Percent	Amount	Percent
Sales	$1,530,500	102.2%	$1,234,000	102.8%
Sales returns	32,500	2.2	34,000	2.8
Net sales	$1,498,000	100.0%	$1,200,000	100.0%
Cost of goods sold	1,043,000	69.6	820,000	68.3
Gross profit	$ 455,000	30.4%	$ 380,000	31.7%
Selling expenses	$ 191,000	12.8%	$ 147,000	12.3%
Administrative expenses	104,000	6.9	97,400	8.1
Total operating expenses	$ 295,000	19.7%	$ 244,400	20.4%
Income from operations	$ 160,000	10.7	$ 135,600	11.3%
Other income	8,500	0.6	11,000	0.9
	$ 168,500	11.3%	$ 146,600	12.2%
Other expense	6,000	0.4	12,000	1.0
Income before income tax	$ 162,500	10.9%	$ 134,600	11.2%
Income tax expense	71,500	4.8	58,100	4.8
Net income	$ 91,000	6.1%	$ 76,500	6.4%

Common Size Statements

Vertical analysis with both dollar and percentage amounts is also useful in comparing one company with another or with industry averages. Such comparisons are easier to make with the use of ***common-size statements*** in which all items are expressed in percentages.

CLOVER CORPORATION
Comparative Income Statements
For the Years Ended December 31

What conclusions can we draw?			Common-Size Percentages	
	2007	2006	2007	2006
Sales	$ 520,000	$480,000	100.0	100.0
Cost of goods sold	360,000	315,000	69.2	65.6
Gross margin	160,000	165,000	30.8	34.4
Operating expenses	128,600	126,000	24.8	26.2
Net operating income	31,400	39,000	6.0	8.2
Interest expense	6,400	7,000	1.2	1.5
Net income before taxes	25,000	32,000	4.8	6.7
Less income taxes (30%)	7,500	9,600	1.4	2.0
Net income	$ 17,500	$ 22,400	3.4	4.7

RATIO ANALYSIS

Financial statements report both on a firm's position at a point in time and on its operations over some past period. However, the real value of financial statements lies in the fact that they can be used to help predict future earnings and dividends. From an investor's standpoint, *predicting the future is what financial statement analysis is all about,* while from management's standpoint, *financial statement analysis is useful both to help anticipate future conditions and, more important, as a starting point for planning actions that will improve the firm's future performance.*

Financial ratios are designed to help one evaluate a financial statement. For example, Firm A might have debt of $5,248,760 and interest charges of $419,900, while Firm B might have debt of $52,647,980 and interest charges of $3,948,600. Which company is stronger? The burden of these debts, and the companies' ability to repay them, can best be evaluated (1) by comparing each firm's debt to its assets and (2) by comparing the interest it must pay to the income it has available for payment of interest. Such comparisons are made by *ratio analysis.*

In the paragraphs that follow, we will calculate the Year 2001 financial ratios for Allied Food Products, using data from the balance sheets and income statements given in Tables 2-1 and 2-2 back in Chapter 2. We will also evaluate the ratios in relation to the industry averages.1 Note that all dollar amounts in the ratio calculations are in millions.

LIQUIDITY RATIOS

A **liquid asset** is one that trades in an active market and hence can be quickly converted to cash at the going market price, and a firm's "liquidity position" deals with this question: Will the firm be able to pay off its debts as they come due over the next year or so? As shown in Table 2-1 in Chapter 2, Allied has debts totaling $310 million that must be paid off within the coming year. Will it have trouble satisfying those obligations? A full liquidity analysis requires the use of cash budgets, but by relating the amount of cash and other current assets to current obligations, ratio analysis provides a quick, easy-to-use measure of liquidity. Two commonly used **liquidity ratios** are discussed in this section.

Liquidity and Efficiency

- Current Ratio
- Acid-test Ratio
- Accounts Receivable Turnover
- Total Asset Turnover
- Days' Sales in Inventory
- Days' Sales Uncollected
- Inventory Turnover

Current Ratio: **Measure of short-term debt-paying ability.**

$$Current\ Ratio = \frac{Current\ Assets}{Current\ Liabilities} = \frac{\$4,476,452}{\$1,944,305} = 2.3\ times$$

Working capital = Current assets – Current liabilities

Quick (Acid- test) Ratio: Measure of short-term debt- paying ability

Quick Ratio

$$= \frac{cash + marketable\ securities + receivable}{Current\ liabilities} = \frac{Current\ assets - inventory}{Current\ liabilities} = \frac{\$2,839,203}{\$1,944,503} = 1.5\ time$$

. Cash ratio = $\frac{Cash}{Current\ Liabilities}$

.Net working capital to total assets $= \frac{Net\ working\ capital}{Total\ Assets}$

$$.\ Interval\ measure = \frac{Current\ Assets}{Average\ daily\ operating\ costs}$$

Receivable turnover: Measure of relative size of accounts receivable balance and effectiveness of credit policies

Receivable Turnover

$$= \frac{Net\ sales}{Average\ accounts\ receivable} = \frac{\$9,188,748}{\$1,481,647} = 6.2\ times$$

Average days' sales uncollected: Measure of average time taken to collect receivables

Average days' sales uncollected

$$= \frac{Days\ in\ year}{Receivable\ turnover} = \frac{365\ days}{6.2\ times} = 58.9\ days$$

Inventory turnover: ***Measure of relative size of inventory***

$$\textbf{Inventory turnover} = \frac{Cost\ of\ goods\ sold}{Average\ inventory} = \frac{\$6{,}844{,}915}{\$1{,}297{,}536} = 5.3\ times$$

Average days' inventory on hand: ***Measure of average days taken to sell inventory***

$$\textbf{Average days' inventory on hand} = \frac{Days\ in\ year}{Inventory\ turnover} = \frac{365\ days}{5.3\ times} = 68.9\ days$$

$$Total\ Assest\ turnover = \frac{Net\ Sales}{Average\ Total\ assets}$$

Solvency

Debt to equity ratio: ***Measure of capital structure and leverage***

$$\textbf{Debt to equity ratio} = \frac{Total\ liabilitie\ s}{Stockholders'\ equity} = \frac{\$2{,}919{,}445}{\$2{,}383{,}301} = 1.2\ times$$

Interest coverage ratio: ***Measure of creditors' protection from default on interest payments***

Interest coverage ratio

$$= \frac{Net\ income\ before\ taxes + \text{int}\,erest\ \exp\ ense}{Interest\ \exp\ ense} = \frac{\$500{,}286 + \$39{,}653}{\$39{,}653} = 13.6 times$$

$$Times\ interest\ earned\ ratio = \frac{EBIT}{Interest}\quad ;\ where\ EBIT = Earings\ Before\ Interest\ and\ Taxes$$

$$.\ Cash\ coverage\ Ratio = \frac{EBIT + Depreciation}{Interest}$$

$$Total\ Debt\ ratio = \frac{Total\ Assets - Total\ equity}{Total\ Assets}$$

$$.\ Equity\ Multiplier = \frac{Total\ Assets}{Total\ Equity}$$

Profitability Ratios

<u>Profit margin</u>: Measure of net income produced by each dollar of sales

$$\textbf{\textit{Profit margin}} = \frac{Net\ income}{Net\ Sales} = \frac{\$310{,}178}{\$9{,}188{,}748} = 3.4\%$$

<u>Gross Profit Rate</u>: A measure of the profitability of the company's products.

$$\textbf{\textit{Gross Profit rate}} = \frac{Gross\ profit}{Net\ Sales}$$

<u>Asset turnover:</u> Measure of how efficiently assets are used to produce sales

$$\textbf{\textit{Assets turnover}} = \frac{Net\ sales}{Average\ total\ assets} = \frac{\$9{,}188{,}748}{\$5{,}237{,}079} = 1.8\ times$$

<u>Return on assets:</u> Measure of overall earning power or profitability

$$\textbf{\textit{Return on assets}} = \frac{Net\ income}{Average\ total\ assets} = \frac{\$310{,}178}{\$5{,}237{,}079} = 5.9\%$$

<u>Return on equity</u>: Measure of the profitability of stockholders' investment

$$\textbf{\textit{Return on equity}} = \frac{Net\ income}{Average\ stockholdes'\ equity} = \frac{\$310{,}178}{\$2{,}204{,}840} = 14.1\%$$

$$\text{Fixed Asset turnover} = \frac{Sales}{Net\ Fixed\ Assets}$$

$$NWC\ turnover = \frac{Sales}{NWC}\ \ wher\ NWC = Net\ working\ Capital$$

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

$$Operating\ margin = \frac{Operating\ Income}{Net\ Sales}$$

Market Strength Ratios

Price/ earnings Ratios: ***Measure of investor confidence in a company***

Price/ earnings Ratio (PE)

$$= \frac{Market\ price\ per\ share}{Earning\ \ per\ share} = \frac{\$31}{\$2.61} = 11.9\ times$$

Dividends yield: ***Measure of the current return to an investor in a stock***

$$\textbf{Dividends yield} = \frac{Dividends\ per\ share}{Market\ price\ per\ share} = \frac{\$0.48}{\$31} = 1.5\ times$$

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

$$Payout\ Ratio = \frac{Dividend\ per\ share}{EPS}$$

$$Book\ value\ per\ share\ (BVPS) = \frac{Stockholder\ equity}{Shares\ Outstanding}$$

$$.\ Earning\ Per\ Share\ (EPS) = \frac{Net\ Income}{Shares\ Outstanding}$$

$$.\ Cash\ Flow\ per\ share\ (CFPS) = \frac{Operating\ cash\ flow}{Shares\ Outstanding}$$

$$.\ Price - \textbf{Book ratio (P/B)} = \frac{Stock\ Price}{BVPS}$$

$$.\ Price\ cash\ flow\ ratio \left(\frac{P}{CF}\right) = \frac{Stock\ Price}{CFPS}$$

$$.\ Dividends\ per\ share = \frac{Total\ Dividends}{Total\ Shares\ outstanding}$$

End of Chapter 01

Essay Questions and Solution

1-150. Financial statements for Prasken Company appear below:

Prasken Company
Statement of Financial Position
December 31, Year 2 and Year 1
(Dollars in thousands)

	Year 2	*Year 1*
Current assets:		
Cash and marketable securities	$ 130	$ 120
Accounts receivable, net	180	180
Inventory	170	180
Prepaid expenses	20	20
Total current assets	500	500
Noncurrent assets:		
Plant & equipment, net	2,000	1,930
Total assets	$2,500	$2,430
Current liabilities:		
Accounts payable	$ 130	$ 160
Accrued liabilities	30	60
Notes payable, short term	130	130
Total current liabilities	290	350
Noncurrent liabilities:		
Bonds payable	310	300
Total liabilities	600	650
Stockholders' equity:		
Preferred stock, $10 par, 10%	100	100
Common stock, $10 par	180	180
Additional paid-in capital--common stock	160	160
Retained earnings	1,460	1,340
Total stockholders' equity	1,900	1,780
Total liabilities & stockholders' equity	$2,500	$2,430

Prasken Company
Income Statement
For the Year Ended December 31, Year 2
(dollars in thousands)

Sales (all on account)	$2,300
Cost of goods sold	1,610
Gross margin	690
Operating expenses	270
Net operating income	420
Interest expense	30
Net income before taxes	390
Income taxes (30%)	117
Net income	$ 273

Dividends during Year 2 totaled $153 thousand, of which $10 thousand were preferred dividends. The market price of a share of common stock on December 31, Year 2 was $210.

Required:
Compute the following for Year 2:
a. Earnings per share of common stock.
b. Price-earnings ratio.
c. Dividend payout ratio.
d. Dividend yield ratio.
e. Return on total assets.
f. Return on common stockholders' equity.
g. Book value per share.
h. Working capital.
i. Current ratio.
j. Acid-test (quick) ratio.
k. Accounts receivable turnover.
l. Average collection period (age of receivables).
m. Inventory turnover.
n. Average sale period (turnover in days).
o. Times interest earned.
p. Debt-to-equity ratio.

Solution

a. Earnings per share = (Net Income - Preferred Dividends) ÷
Average number of common shares outstanding*
= ($273 - $10) ÷ 18 = $14.61
*Number of common
shares outstanding = Common stock ÷ Par value = $180 ÷ $10 = 18
b. Price-earnings ratio = Market price per share ÷ Earnings per share (see above)
= $210 ÷ $14.61 = 14.4
c. Dividend payout ratio = Dividends per share* ÷ Earnings per share (see above)
= $7.94 ÷ $14.61 = 54.4%
*Dividends per share = Common dividends ÷ Common shares**
= $143 ÷ 18 = $7.94
**See above
d. Dividend yield ratio = Dividends per share* ÷
Market price per share
= $7.94 ÷ $210.00 = 3.78% *See above
e. Return on total assets = Adjusted net income* ÷ Average total assets**
= $294 ÷ $2,465 = 11.93%
*Adjusted net income = Net income + [Interest expense × (1-Tax rate)]
= $273 + [$30 × (1 - 0.30)] = $294
**Average total assets = ($2,500 + $2,430)÷2 = $2,465
f. Return on common stockholders’ equity = (Net income - Preferred dividends) ÷
Average common stockholders’ equity*
= ($273 - $10)÷$1,740 = 15.11%
*Average common stockholders’ equity = ($1,800 + $1,680)÷2 = $1,740
g. Book value per share = Common stockholders’ equity ÷
Number of common shares outstanding* = $1,800 ÷ 18 = $100.00
*Number of common shares outstanding = Common stock ÷ Par value
= $180 ÷ $10 = 18
h. Working capital = Current assets - Current liabilities = $500 - $290 = $210
i. Current ratio = Current assets ÷ Current liabilities = $500 ÷ $290 = 1.72
j. Acid-test ratio = Quick assets* ÷ Current liabilities = $310 ÷ $290 = 1.07

*Quick assets = Cash + Marketable securities + Current receivables
= $130 + $180 = $310
k. Accounts receivable turnover = Sales on account ÷ Average accounts receivable*
= $2,300 ÷ $180 = 12.78
*Average accounts receivable = ($180 + $180)÷2 = $180
l. Average collection period = 365 days ÷ Accounts receivable turnover*
= 365 ÷ 12.78 = 28.6 days
*See above
m. Inventory turnover = Cost of goods sold ÷ Average inventory*
= $1,610 ÷ $175 = 9.20
*Average inventory = ($170 + $180)÷2 = $175
n. Average sale period = 365 days ÷ Inventory turnover*
= 365 ÷9.20 = 39.7 days
*See above
o. Times interest earned = Net operating income ÷ Interest expense
= $420 ÷ $30 = 14.00
p. Debt-to-equity ratio = Liabilities ÷ Stockholders' equity= $600 ÷ $1,900 = 0.32

Problems

I) _ True/False Questions

1-1. Vertical analysis of financial statements is accomplished through the preparation of common-size statements.

1-2. The gross margin percentage is computed by dividing the gross margin by net income before interest and taxes.

1-4. The dividend yield ratio is calculated by dividing dividends per share by earnings per share.

1-6. To compute the return on total assets, net income should be adjusted by adding after-tax interest expense and preferred dividends.

1-7. When computing the return on common equity, the income available for common stockholders is determined by deducting preferred dividends from net income.

1-11. A company's acid-test ratio will always be less than or equal to its current ratio.

1-12. A company could improve its acid-test ratio by selling some equipment it no longer needs for cash.

II) Multiple Choice Questions

1-16. The gross margin percentage is equal to:

A) (Net operating income + Operating expenses)/Sales
B) Net operating income/Sales
C) Cost of goods sold/Sales
D) Cost of goods sold/Net income

1-17. Earnings per share of common stock is computed by:

A) dividing net income by the average number of common and preferred shares outstanding.
B) dividing net income by the average number of common shares outstanding.
C) dividing net income minus preferred dividends by the average number of common and preferred shares outstanding.
D) dividing net income minus preferred dividends by the average number of common shares outstanding.

1-33. Fackrell Company has provided the following data:

Common stock:
Shares outstanding 20,000
Market value, December 31 .... $150,000
Book value, December 31 .... $80,000
Dividends paid $40,000
Preferred stock, 8%, 100 par $100,000
Net income $100,000
Interest on long-term debt $10,000

The price-earnings ratio is closest to:

A) 1.50
B) 1.63
C) 2.50
D) 2.88

1-34. Farrell Company has provided the following data:

Common stock:
Shares outstanding 30,000
Market value, December 31 .... $165,000
Book value, December 31 .... $90,000

Dividends paid $50,000
Preferred stock, 10%, $100 par $100,000
Net income $150,000
Interest on long-term debt $15,000

The price-earnings ratio is closest to:

A) 1.10
B) 1.18
C) 1.65
D) 1.83

1-37. Tribble Company has provided the following data:
Sales $5,000,000
Interest expense $30,000
Total assets, beginning of year $185,000
Total assets, end of year $215,000
Tax rate 30%
Return on total assets 15.5%
Tribble Company's net income was:

A) $1,000
B) $10,000
C) $22,000
D) $31,000

1-40. The following account balances have been provided for the end of the most recent year:
Total assets $1,000,000
Total liabilities $400,000
Total stockholders' equity $600,000
Common stock (40,000 shares) $300,000
Preferred stock (10,000 shares) $100,000

The common stock's book value per share is:

A) $22.50
B) $12.50
C) $20.00
D) $12.00

1-41. Nybo Company's current liabilities are $60,000, its long-term liabilities are$180,000, and its working capital is $90,000. If Nybo Company's debt to equity ratio is 0.4, its total long-term assets must equal:

A) $490,000
B) $840,000
C) $600,000
D) $690,000

1-42. Nelson Company's current liabilities are $50,000, its long-term liabilities are $150,000, and its working capital is $80,000. If Nelson Company's debt-to-equity ratio
is 0.32, its total long-term assets must equal:

A) $625,000
B) $745,000
C) $825,000
D) $695,000

1-43. Selected data from Perry Corporation's financial statements follow:
Current ratio 2.0
Acid-test ratio 1.5
Current liabilities $120,000
Inventory turnover 8
Gross profit margin as a percentage of sales 40%
The company has no prepaid expenses and there were no changes in inventories during the year. Perry Corporation's net sales for the year were:

A) $800,000
B) $480,000
C) $1,200,000
D) $240,000

1-44. Mattick Company has provided the following data:
Inventory and prepaid expenses $36,000
Current ratio 2.4
Acid-test ratio 1.6

Mattick Company's current liabilities are:
A) $60,000
B) $30,000
C) $45,000
D) $48,000

1-45. The Seabury Company has a current ratio of 3.5 and an acid-test ratio of 2.8. Inventory equals $49,000 and there are no prepaid expenses. Seabury Company's current liabilities must be:

A) $70,000
B) $100,000
C) $49,000
D) $125,000

1-46. Matlock Company has provided the following data:
Inventory and prepaid expenses $35,000
Current ratio 2.2
Acid-test Ratio 1.5

Matlock Company's current liabilities were:
A) $40,000
B) $50,000
C) $63,000
D) $44,100

1-57. Selected information from the accounting records of Kay Company for the most recent year follow:
Net sales $1,800,000
Cost of goods sold $1,200,000
Inventory, beginning $360,000
Inventory, ending $312,000

Kay's inventory turnover for the year is closest to:
A) 3.57
B) 3.85
C) 5.36
D) 5.77

P1-1)
Required:

Prepare a horizontal analysis of the following comparative income statement of Newsletter E-Mail, Inc. Round percentage changes to the nearest one- tenth percent (three decimal place).

Newsletter E-Mail, Inc.
Comparative Income Statement
Years Ended December 31, 2005 and 2004

		2005	2004
Total Revenues		$430,000	$373,000
Expenses			
	Cost of Goods Sold	202,000	188,000
	Selling and general expenses	98,000	93,000
	Interest expense	7,000	4,000
	Income tax expense	42,000	37,000
	Total Expenses	349,000	322,000
Net Income		$81,000	$51,000

Why did net income increase by a higher percentage than total revenues increased in 2005?

P1-2)
Smith Corporation provides the following comparative income statement:

Smith Corporation
Comparative Income Statement
For the Years Ended December 31, 20X1 and 20X2

	20X2	20X1	Percentage of Increase or (Decrease)
Sales	$570,000	$680,000	
Cost of Goods Sold	200,000	170,000	
Gross Profit	370,000	510,000	
Operating Expense	100,000	210,000	
Net Income	$270,000	$300,000	

(a) Using horizontal analysis, fill in the percentage change and dollars change.
(b) Evaluate the results.

P1-3)
Operating data for Khan Corporation are presented bellow:

	2006	2005
Sales	$800,000	$600,000
Cost of Goods Sold	$464,000	$378,000
Selling expense	$120,000	$72,000
Administrative expense	$80,000	$54,000

Income tax expense	$38,400	$25,200
Net income	$97,000	$70,800

Instructions

Prepare a schedule showing a vertical analysis for 2006 and 2005.

P1-4)

The comparative balance sheets of Barkley Corporation are presented below:

BARKLEY CORPORATION
Comparative Balance sheets
December 31

	2006	2005
Assets		
Current assets	$76,000	$80,000
Property, plant, equipment(net)	$99,000	$90,000
Intangible assets	$25,000	$40,000
Total assets	**$200,000**	**$210,000**
Liabilities and stockholders' equity		
Current Liabilities	$45,800	$48,000
Long-term liabilities	$138,000	$150,000
Stockholders' equity	$16,200	$12,000
Total liabilities and stockholders' equity	**$200,000**	**$210,000**

Instructions

(a) Prepare a horizontal analysis of the balance sheet data for Barkley Corporation using 2005 as a base. (Show the amount of increase or decrease as well.)

(b) Prepare a vertical analysis of the balance sheet data for Barkley Corporation in columnar form for 2006.

P1-5)

Selected comparative financial statements of Shipshape Company follow:

SHIPSHAPE COMPANY
Comparative Income Statement
For Years Ended December 31, 2006, 2005, and 2004

	2006	**2005**	**2004**
Sales	$167,200	$125,500	$76,000
Cost of goods sold	71,060	65,260	33,440
Gross profit	$96,140	$60,240	$42,560
Selling expenses	12,540	10,291	7,828
Administrative expenses	40,797	26,104	13,528
Total expenses	$53,337	$36,395	$21,356
Income before taxes	$42,803	$23,845	$21,204
Income taxes	12,841	7,154	6,361
Net income	$29,962	$16,691	$14,843

SHIPSHAPE COMPANY
Comparative Balance Sheet
December 31, 2006, 2005, and 2004

	2006	**2005**	**2004**
Assets			
Current assets	$34,420	$28,888	$21,789
Long-term investments	0	500	2,550
Plant assets, net	82,000	64,000	50,000
Total assets	$116,420	$93,388	$74,339
Liabilities and Equity			
Current liabilities	$20,010	$15,340	$14,300
Common stock	48,000	48,000	40,000
Other contributed capital	10,000	10,000	8,000
Retained earnings	38,410	20,048	12,039
Total liabilities and equity	$116,420	$93,388	$74,339

Required

1. Using horizontal analysis fill in the percentage change and dollars change with 2004 as the base year.

2. Compute each year's current ratio.

3. Express the income statement and balance sheet data in common-size percents.**(vertical analysis)**

Analysis Component

4. Comment on any significant relations revealed by the ratios and percents computed.

P1-6)

Charles Corporation's balance sheet at December 31, 20XX, shows the following:

Current Assets	
Cash	$4,000
Marketable Securities	8,000
Accounts Receivable	100,000
Inventories	120,000
Prepaid Expenses	1,000
Total Current Assets	$233,000
Current Liabilities	
Note Payable	$5,000
Accounts Payable	150,000
Accrued Expenses	20,000
Income Taxes Payable	1,000
Total Current Liabilities	$176,000
Long -Term Liabilities	$ 340,000

Determine (a) working capital, (b) current ratio, and (c) quick rat

<u>P1-7)</u>

Jones Corporation's financial statements appear below.

Jones Corporation
Balance Sheet
December 31, 2009

ASSETS		
Current Assets		
cash	$100,000	
marketable Securities	200,000	
inventory	300,000	
Total Current Assets		**600,000**
Noncurrent Assets		
Plant Assets		500,000
Total Assets		**$1,100,000**
LIABILITIES AND STOCKHOLDER' S EQUITY		
Current Liabilities	$200,000	
Long-term Liabilities	100,000	
Total Liabilities		300,000
Stockholders' Equity		
Common Stock, $1 par value,		
100,000 shares	100,000	
Premium on Common Stock	500,000	
Retained Earnings	200,000	
Total Stockholders' Equity		800,000
Total Liabilities and stockholders' Equity		**$1,100,000**

Jones Corporation
Income Statement
For the Year Ended December 31, 2009

Net Sales	10,000,000
Cost of Goods Sold	6,000,000
Gross Profit	4,000,000
Operating Expenses	1,000,000
Income before Taxes	3,000,000
Income Taxes (50% rate)	1,500,000
Net Income	1,500,000

Addition information available is a market price of $150 per share of stock and total dividends of $600,000 for 2008, and 250,000 of inventory as of December 31, 2009. Compute the following ratios:

(a) Current ratio

(b) Quick ratio

(c) Inventory turnover
(d) Age of inventory
(e) Stockholders' equity to total liabilities
(f) Earnings per share
(g) Price/ earning ratio
(h) Dividends per share
(i) Dividend payout

P1-8)

The financial statements of Cunningham Financial Group included the following items:

	Current Year	Preceding Year
Balance Sheet		
Cash	17,000	22,000
Short-term investments	11,000	26,000
Net receivables	64,000	73,000
Inventory	77,000	71,000
Prepaid expenses	16,000	8,000
Total current assets	185,000	200,000
Total current Liabilities	131,000	91,000
Income statement		
Net credit sales	454,000	
Cost of goods sold	297,000	

Required

Compute the following ratios the current years:

(a) Current ratio
(b) Acid- test ratio
(c) Inventory turnover
(d) Accounts Receivable turnover
(e) Day's sales in average receivable

P1-9)

Georgette Company has the following comparative balance sheet data:

Georgette Company
Balance Sheet
December, 31

	2006	2005
Cash	$20,000	$30,000
Receivables (net)	$65,000	$60,000
Inventories	$60,000	$50,000
Plant assets(net)	$200,000	$180,000
	$345,000	$320,000
Accounts Payable	$50,000	$60,000
Mortgage Payable (15%)	$100,000	$100,000
Common Stock, $10 par	$140,000	$120,000
Retained earnings	$55,000	$40,000

	$345,000	$320,000

Additional information for 2006:

1. Net income was $25,000.
2. Sales on account were $420,000. Sales return and allowances amounted to $20,000.
3. Cost of goods sold was $198,000.

Instructions

Compute the following ratios at December 31, 2006.

(a) Current.
(b) Acid-test.
(c) Receivable turnover.
(d) Inventory turnover.

P1-10)

Selected comparative statement data for Meng Products Company are presented below: All balance sheet data are as of December 31.

	2006	2005
Net Sales	$800,000	$720,000
Cost of goods sold	$480,000	$40,000
Interest expense	$7,000	$5,000
Net income	$64,000	$42,000
Accounts receivable	$120,000	$100,000
Inventory	$85,000	$75,000
Total assets	$600,000	$500,000
Total common stockholders' equity	$450,000	$310,000

Instructions

Compute the following ratios for 2006:

(a) Profit margin.
(b) Asset turnover.
(c) Return on assets
(d) Return on common stockholders' equity

P1-11)

Perez Corporation experienced a fire on December 31, 2006, in which its financial records were partially destroyed. It has been able to salvage some of the records and has ascertained the following balances:

	December 31,2006	**December 31,2005**
Cash	$30,000	$10,000
Receivable (net)	$72,500	$126,000
Inventory	$200,000	$180,000
Accounts Payable	$50,000	$90,000
Note Payable	$30,000	$60,000
Common Stock , $100 par	$400,000	$400,000
Retained Earnings	$115,000	$101,000

Additional information:

1. The inventory turnover is 3.8 times
2. The retur on common stockholders' equity is 22%. The company had no additional paid-in capital.
3. The receivables turnover is 8.4 times.
4. The return on assets is 20%.
5. Total assets at December 31, 2005, were $ 605,000.

Instructions:

Compute the following for Perez Corporation:

(a) Cost of goods sold for 2006

(b) Net sales for 2006

(c) Net income for 2006 (d) Total assets at December 31, 2006.

P1-12)

Selected year-end financial statements of Jessica's Autenite Tours Corporation follow. (*Note:* All sales are on credit; Selected balance sheet amounts at December 31, 2004, were total assets, $220,700; inventory, $53,400; common stock, $50,000; and retained earnings, $88,800.)

JESSICA'S AUTENITE TOURS CORPORATION
Income Statement
For Year Ended December 31, 2005

Sales	$427,600
Cost of goods sold	212,050
Gross profit	$215,550
Operating expenses	94,000
Interest expense	4,450
Income before taxes	$117,100
Income taxes	35,130
Net income	$81,970

JESSICA'S AUTENITE TOURS CORPORATION
Balance Sheet
December 31, 2005

Assets		**Liabilities and Equity**	
Cash	$ 22,700	Accounts payable	$ 28,750
Short-term investment	5,300	Accrued wages payable	2,000
Accounts receivable, net	34,000	Income taxes payable	1,250
Merchandise inventory	51,200	Long-term Note Payable, secured by mortgage on plant assets	55,000
Prepaid expenses	3,000	Common stock, $5 par value	50,000
Plant assets, net	125,000	Retained earnings	104,200
Total assets	$241,200	Total liabilities and equity	$241,200

Required

Compute the following: (1) current ratio, (2) acid-test ratio, (3) days' sales uncollected, (4) inventory turnover, (5) days' sales in inventory, (6) ratio of pledged assets to secured liabilities, (7) times interest earned, (8) profit margin ratio, (9) total asset turnover, (10) return on total assets, and (11) return on common stockholders' equity.

P1-13)

Summary information from the financial statements of two companies competing in the industry follows:

Data from the year-end balance sheets:

	Ace Co.	Slam Co.
Assets		
Cash	$ 91,000	$ 52,000
Accounts receivable, net	60,200	40,000
Merchandise inventory	50,400	80,500
Plant assets, net	201,170	205,000
Total assets	$402,770	$377,500
Liabilities and Equity		
Current liabilities	$ 50,400	$ 115,000
Long-term notes payable	64,000	176,000
Common stock, $2 par value	100,000	50,000
Retained earnings	188,370	36,500
Total liabilities and equity	$402,770	$377,500

Data from the current year's income statement:

	Ace Co.	Slam Co.
Sales	$540,030	$468,000
Cost of goods sold	393,190	303,300
Interest expense	6,400	20,400
Income tax expense	54,031	114,100
Net income	86,409	30,200
Basic earnings per share	1.73	1.21

Beginning-of-year balance sheet data:

	Ace Co.	Slam Co.
Accounts receivable, net	$ 54,700	$38,000
Merchandise inventory	45,500	88,000
Total assets	181,166	355,870
Common stock, $2 par value	100,000	40,000
Retained earnings	166,500	30,100

Required

1. For both companies compute the (a) current ratio, (b) acid-test ratio, (c) accounts (including notes) receivable turnover, (d) merchandise inventory turnover, (e) days' sales in inventory, and (f) days' sales uncollected. Identify the company you consider to have the better short-term financial position and explain why.

2. For both companies compute the (a) profit margin, (b) total asset turnover, (c) return on total assets, and (d) return on common stockholders' equity. Assuming that each company paid cash dividends of $.75 per share and each company's stock can be purchased at $32 per share, compute their (e) price-earnings ratios and (f) dividend yields. Which company would you recommend? Why?

PROBLEM 1-11B
Interpretation of Financial Ratios
(LO1, LO2, LO3)

CHECK FIGURE
none

Shannon Michaels is interested in the stock of Acelicom, a company that sells building materials to the construction industry. Before purchasing the stock, Shannon would like your help in analyzing the following data:

	Year 3	*Year 2*	*Year 1*
Sales trend	135	122	110
Current ratio	2.5	2.4	2.2
Acid-test (quick) ratio....................................	0.8	1.0	1.2
Accounts receivable turnover	10.2	10.9	13.1
Average sale period	6.8	8.2	8.8
Dividend yield	7.8%	6.9%	6.1%
Dividend payout ratio	40%	50%	60%
Return on total assets......................................	13.1%	12.4%	11.0%
Return on common stockholders' equity	14.5%	11.2%	9.6%
Dividends paid per share *	$1.55	$1.55	$1.55

*There have been no changes in common stock outstanding over the three-year period.

Shannon would like answers to a number of questions about the trend of events in Acelicom over the last three years. His questions are:

a. Is it becoming easier for the company to pay its bills as they come due?
b. Are customers paying their accounts at least as fast now as they were in Year 1?
c. Is the total of the accounts receivable increasing, decreasing, or remaining constant?
d. Is the level of inventory increasing, decreasing, or remaining constant?
e. Is the market price of the company's stock going up or down?
f. Is the earnings per share increasing or decreasing?
g. Is the price-earning ratio going up or down?
h. Is the company employing financial leverage to the advantage of the common stockholders?

Required:

Answer each of Shannon's questions using and explain how you arrived at your answer.

PROBLEM 1-12B
Common-Size Statements and Financial Ratios for Creditors
(LO1, LO3, LO4)

CHECK FIGURE
(1e) Inventory turnover this year: 4.5
(1g) Times interest earned last year: 11.7

Vicki Newport organized Newport Industry 10 years ago to produce and sell several electronic devices on which she had secured patents. Although the company has been fairly profitable, it is now experiencing a severe cash shortage. For this reason, it is requesting a $500,000 long-term loan from San Juan Bank, $125,000 of which will be used to bolster the Cash account and $375,000 of which will be used to modernize equipment. The company's financial statements for the two most recent years follow:

Newport Industry
Comparative Balance Sheet

	This Year	*Last Year*
Assets		
Current assets:		
Cash	$ 60,000	$ 130,000
Marketable securities	0	30,000
Accounts receivable, net	490,000	320,000
Inventory	970,000	610,000
Prepaid expenses	30,000	40,000
Total current assets	1,550,000	1,130,000
Plant and equipment, net	1,450,000	1,390,000
Total assets	$3,000,000	$2,520,000
Liabilities and Stockholders' Equity		
Liabilities:		
Current liabilities	$ 530,200	$ 378,600
Bonds payable, 12%	400,000	400,000
Total liabilities	930,200	778,600
Stockholders' equity:		
Preferred stock, $25 par, 8%	200,000	200,000
Common stock, $10 par	700,000	700,000
Retained earnings	1,169,800	841,400
Total stockholders' equity	2,069,800	1,741,400
Total liabilities and equity	$3,000,000	$2,520,000

Newport Industry
Comparative Income Statement and Reconciliation

	This Year	Last Year
Sales	$4,728,000	$4,640,000
Cost of goods sold	3,544,000	3,560,000
Gross margin	1,184,000	1,080,000
Selling and administrative expenses	544,000	520,000
Net operating income	640,000	560,000
Interest expense	48,000	48,000
Net income before taxes	592,000	512,000
Income taxes (30%)	177,600	153,600
Net income	414,400	358,400
Dividends paid:		
Preferred dividends	16,000	16,000
Common dividends	70,000	60,000
Total dividends paid	86,000	76,000
Net income retained	328,400	282,400
Retained earnings, beginning of year	841,400	559,000
Retained earnings, end of year	$1,169,800	$ 841,400

During the past year, the company introduced several new product lines and raised the selling prices on a number of old product lines in order to improve its profit margin. The company also hired a new sales manager, who has expanded sales into several new territories. Sales terms are 2/10, n/30. All sales are on account. The following ratios are typical of companies in this industry:

Current ratio	2.5	
Acid-test (quick) ratio	1.3	
Average collection period	21	days
Average sale period	68	days
Debt-to-equity ratio	0.90	
Times interest earned	6.00	
Return on total assets	17%	
Price-earnings ratio	11	

Required:

1. To assist the San Juan Bank in making a decision about the loan, compute the following ratios for both this year and last year:
   a. The amount of working capital.
   b. The current ratio.
   c. The acid-test (quick) ratio.
   d. The average collection period. (The accounts receivable at the beginning of last year totaled $270,000.)
   e. The average sale period. (The inventory at the beginning of last year totaled $510,000.)
   f. The debt-to-equity ratio.
   g. The times interest earned ratio.
2. For both this year and last year:
   a. Present the balance sheet in common-size format.
   b. Present the income statement in common-size format down through net income.
3. Comment on the results of your analysis in (1) and (2) above and make a recommendation as to whether or not the loan should be approved.

PROBLEM 1-13B
Financial Ratios for Common Stockholders
(LO2)

CHECK FIGURE
(1a) Earnings per share this year: $5.69
(1c) Dividend payout ratio last year: 17.6%

Refer to the financial statements and other data in PROBLEM 14-12B. Assume that you are an account executive for a large brokerage house and that one of your clients has asked for a recommendation about the possible purchase of Newport Industry stock. You are not acquainted with the stock and for this reason wish to do some analytical work before making a recommendation.

Required:

1. You decide first to assess the well-being of the common stockholders. For both this year and last year, compute:
   a. The earnings per share. There has been no change in preferred or common stock over the last two years.
   b. The dividend yield ratio for common stock. The company's stock is currently selling for $40 per share; last year it sold for $46 per share.
   c. The dividend payout ratio for common stock.
   d. The price-earnings ratio. How do investors regard Newport Industry as compared to other companies in the industry? Explain.
   e. The book value per share of common stock. Does the difference between market value and book value suggest that the stock is overpriced? Explain.
2. You decide next to assess the company's rate of return. Compute the following for both this year and last year:
   a. The return on total assets. (Total assets at the beginning of last year were $2,360,000.)
   b. The return on common stockholders' equity. (Stockholders' equity at the beginning of last year was $1,640,400.)
   c. Is the company's financial leverage positive or negative? Explain.
3. Would you recommend that your client purchase shares of Newport Industry stock? Explain.

PROBLEM 1-14B
Effects of Transactions on Various Ratios
(LO3)

CHECK FIGURE
(1c) Acid-test ratio: 1.5

Cricket Inc.'s working capital accounts at the beginning of the year are given below:

Cash	$50,000
Marketable Securities	$45,000
Accounts Receivable, net	$205,000
Inventory	$140,000
Prepaid Expenses	$60,000
Accounts Payable	$140,000
Notes Due within One Year	$40,000
Accrued Liabilities	$20,000

During the year, Cricket Inc. completed the following transactions:

x. Paid a cash dividend previously declared, $12,000.
a. Issued additional shares of common stock for cash, $125,000.
b. Sold inventory costing $55,000 for $85,000, on account.
c. Wrote off uncollectible accounts in the amount of $10,000, reducing the accounts receivable balance accordingly.
d. Declared a cash dividend, $24,000.
e. Paid accounts payable, $55,000.
f. Borrowed cash on a short-term note with the bank, $35,000.
g. Sold inventory costing $30,000 for $24,000 cash.
h. Purchased inventory on account, $85,000.
i. Paid off all short-term notes due, $55,000.
j. Purchased equipment for cash, $34,000.
k. Sold marketable securities costing $32,000 for cash, $25,000.
l. Collected cash on accounts receivable, $120,000.

Required:

1. Compute the following amounts and ratios as of the beginning of the year:
   a. Working capital.
   b. Current ratio.
   c. Acid-test (quick) ratio.
2. Indicate the effect of each of the transactions given above on working capital, the current ratio, and the acid-test (quick) ratio. Give the effect in terms of increase, decrease, or none. Item (x) is given below as an example of the format to use:

	The Effect on		
Transaction	*Working Capital*	*Current Ratio*	*Acid-Test Ratio*
(x) Paid a cash dividend previously declared	None	Increase	Increase

PROBLEM 1-15B
Comprehensive Ratio Analysis
(LO2, LO3, LO4)

CHECK FIGURE
(2a) Earnings per share this year: $8.85
(2b) Dividend yield ratio last year: 4.6%

You have just been hired as a loan officer at Wamamish Bank. Your supervisor has given you a file containing a request from SafeT Corp., a manufacturer of safety helmets, for a $4,000,000, five-year loan. Financial statement data on the company for the last two years follow:

SafeT Corp.
Comparative Balance Sheet
For the Years Ended December 31

	This Year	*Last Year*
Assets		
Current assets:		
Cash	$ 239,000	$ 574,000
Marketable securities	0	200,000
Accounts receivable, net	2,640,000	1,990,000
Inventory	4,520,000	3,390,000
Prepaid expenses	350,000	270,000
Total current assets	7,749,000	6,424,000
Plant and equipment, net	9,690,000	8,660,000
Total assets	$17,439,000	$15,084,000
Liabilities and Stockholders' Equity		
Liabilities:		
Current liabilities	$ 3,980,000	$ 2,610,000
Note payable, 10%	4,000,000	3,600,000
Total liabilities	7,980,000	6,210,000
Stockholders' equity:		
Preferred stock, 8%, $100 par value	2,500,000	2,500,000
Common stock, $50 par value	5,000,000	5,000,000
Retained earnings	1,959,000	1,374,000
Total stockholders' equity	9,459,000	8,874,000
Total liabilities and stockholders' equity	$17,439,000	$15,084,000

SafeT Corp.
Comparative Income Statement and Reconciliation

	This Year	*Last Year*
Sales (all on account)	$15,500,000	$13,100,000
Cost of goods sold	9,460,000	7,600,000
Gross margin	6,040,000	5,500,000
Selling and administrative expenses	4,090,000	4,060,000
Net operating income	1,950,000	1,440,000
Interest expense	400,000	360,000
Net income before taxes	1,550,000	1,080,000
Income taxes (30%)	465,000	324,000
Net income	1,085,000	756,000
Dividends paid:		
Preferred dividends	200,000	200,000
Common dividends	300,000	250,000
Total dividends paid	500,000	450,000
Net income retained	585,000	306,000
Retained earnings, beginning of year	1,374,000	1,068,000
Retained earnings, end of year	$ 1,959,000	$ 1,374,000

Vanna Cho, who just a year ago was appointed president of SafeT Corp., argues that although the company has had a "spotty" record in the past, it has "turned the corner," as evidenced by an 18% jump in sales and by a greatly improved earnings picture between last year and this year. Ms. Cho also points out that investors generally have recognized the improving situation at SafeT Corp., as shown by the increase in market value of the company's common stock, which is currently selling for $63.70 per share (up from $53.90 per share last year). Ms. Cho feels that with her leadership and with the modernized equipment that the $4,000,000 loan will permit the company to buy, profits will be even stronger in the future. Ms. Cho has a reputation in the industry for being a good manager who runs a "tight" ship.

Not wanting to botch your first assignment, you decide to generate all the information that you can about the company. You determine that the following ratios are typical of companies in SafeT Corp.'s industry:

Current ratio	2.2
Acid-test (quick) ratio	1.0
Average collection period	33 days
Average sale period	119 days
Return on assets	11.1%
Debt-to-equity ratio	0.71
Times interest earned	6.3
Price-earnings ratio	10.2

Required:

1. You decide first to assess the rate of return that the company is generating. Compute the following for both this year and last year:
   a. The return on total assets. (Total assets at the beginning of last year were $15,006,000.)
   b. The return on common stockholders' equity. (Stockholders' equity at the beginning of last year totaled $8,568,000.) There has been no change in preferred or common stock over the last two years.)
   c. Is the company's financial leverage positive or negative? Explain.

2. You decide next to assess the well-being of the common stockholders. For both this year and last year, compute:
   a. The earnings per share.
   b. The dividend yield ratio for common stock.
   c. The dividend payout ratio for common stock.
   d. The price-earnings ratio. How do investors regard SafeT Corp. as compared to other companies in the industry? Explain.
   e. The book value per share of common. Does the difference between market value per share and book value per share suggest that the stock at its current price is a bargain? Explain.
   f. The gross margin percentage.
3. You decide, finally, to assess creditor ratios to determine both short-term and long-term debt-paying ability. For both this year and last year, compute:
   a. Working capital.
   b. The current ratio.
   c. The acid-test ratio.
   d. The average collection period. (The accounts receivable at the beginning of last year totaled $1,700,000.)
   e. The average sale period. (The inventory at the beginning of last year totaled $1,680,000.)
   f. The debt-to-equity ratio.
   g. The times interest earned.
4. Would you recommend that the loan be granted?

PROBLEM 1-16B
Common-Size Financial Statements
(LO1)

CHECK FIGURE
none

Refer to the financial statement data for SafeT Corp. given in PROBLEM 14-15B.

Required:

For both this year and last year:

1. Present the balance sheet in common-size format.
2. Present the income statement in common-size format down through net income.
3. Comment on the results of your analysis.

PROBLEM 1-17B
Effects of Transactions on Various Financial Ratios
(LO2, LO3, LO4)

CHECK FIGURE
none

In the right-hand column below, certain financial ratios are listed. To the left of each ratio is a business transaction or event relating to the operating activities of Stuen Inc..

	Business Transaction or Event	*Ratio*
1.	Declared a cash dividend.	Current ratio
2.	Sold inventory on account at cost.	Acid-test (quick) ratio
3.	The company issued bonds with an interest rate of 12%. The company's return on assets is 15%.	Return on common stockholders' equity
4.	Net income decreased by 4% between last year and this year. Long-term debt remained unchanged.	Times interest earned
5.	A previously declared cash dividend was paid.	Current ratio
6.	The market price of the company's common stock dropped from $30.00 to $24.00. The dividend paid per share remained unchanged.	Dividend payout ratio
7.	Obsolete inventory totaling $65,000 was written off as a loss.	Average sale period ratio
8.	Sold inventory for cash at a profit.	Debt-to-equity ratio
9.	Changed customer credit terms from 2/10, n/15 to 2/15, n/30 to comply with a change in industry practice.	Accounts receivable turnover ratio
10.	Issued a common stock dividend on common stock.	Book value per share
11.	The market price of the company's common stock increased from $30.00 to $35.00.	Book value per share
12.	Paid $75,000 on accounts payable.	Working capital
13.	Issued a stock dividend to common stockholders.	Earnings per share
14.	Paid accounts payable.	Debt-to-equity ratio
15.	Purchased inventory on credit terms.	Acid-test (quick) ratio
16.	An uncollectible account was written off against the Allowance for Bad Debts.	Current ratio
17.	The market price of the company's common stock increased from $30.00 to $35.00. Earnings per share remained unchanged.	Price-earnings ratio
18.	The market price of the company's common stock increased from $30.00 to $35.00. The dividend paid per share remained unchanged.	Dividend yield ratio

Required:

Indicate the effect that each business transaction or event would have on the ratio listed opposite to it. State the effect in terms of increase, decrease, or no effect on the ratio involved, and give the reason for your answer. In all cases, assume that the current assets exceed the current liabilities both before and after the event or transaction. Use the following format for your answers:

Effect on Ratio *Reason for Increase, Decrease, or No Effect*
1.
Etc…

Chapter 02: Earnings and Cash Flow Analysis

ANALYSIS OBJECTIVES ***(Cash =Lifeblood of Business)***

- Review the Statement of Cash flows
- Explain the relevance of cash flows in analyzing business activities.
- Describe the reporting of cash flows by business activities.
- Describe the preparation and analysis of the statement of cash flows.
- Interpret cash flows from operating activities.
- Analyze cash flows under alternative company and business conditions.
- Describe alternative measures of cash flows and their usefulness.
- Illustrate an analytical tool in evaluating cash flows (Appendix 7A).

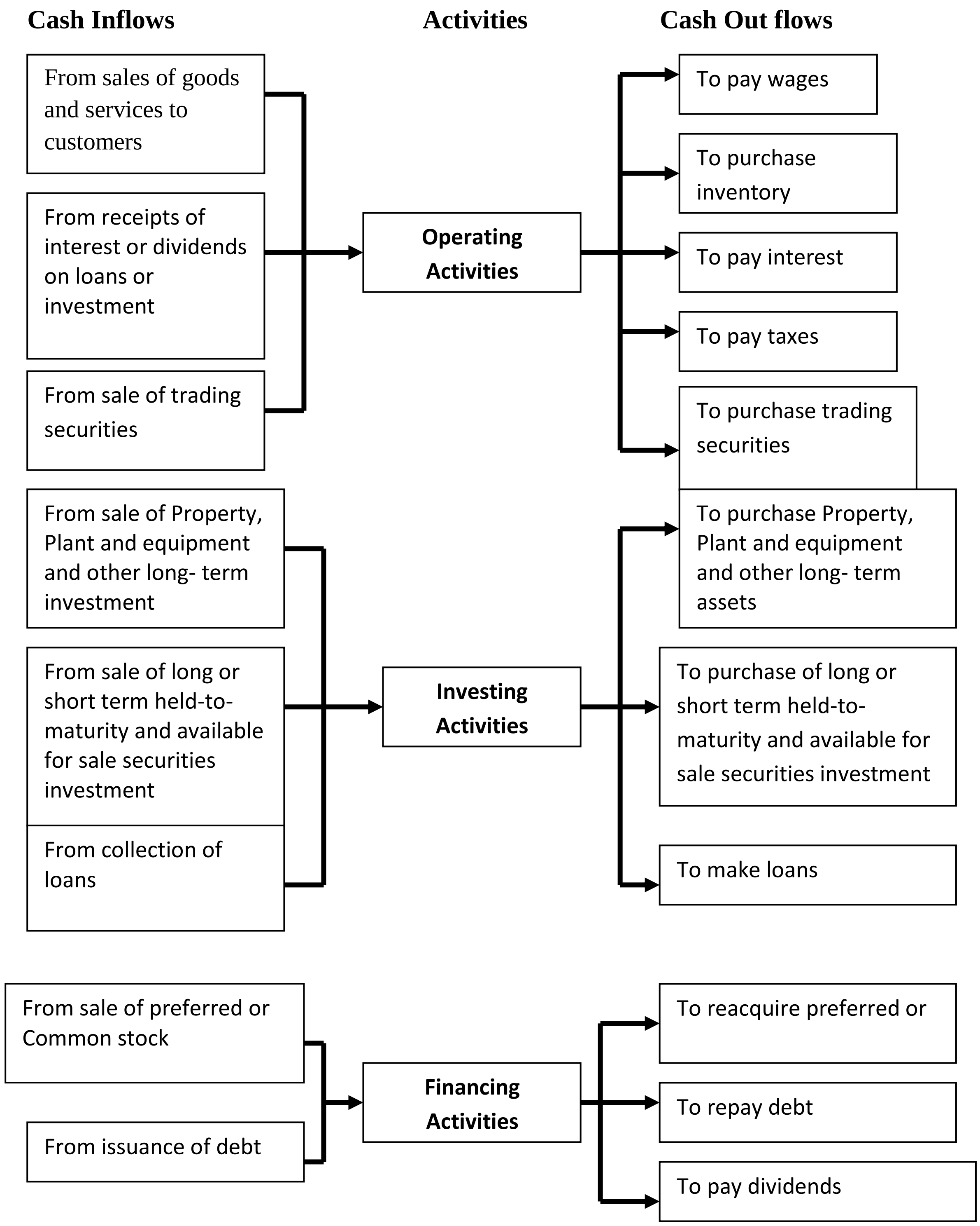
Purpose of the Statement of Cash Flows

The primary purpose of the statement of cash flows is to provide information about the cash receipts and cash payments of an entity during a period. A secondary objective is to provide information about the operating, investing, and financing activities of the entity during the period.

- Provides relevant information about a company's cash receipts and cash disbursements.
- Helps investors and creditors to assess
  - future net cash flows
  - liquidity
  - Long-term solvency.
- Required for each income statement period reported.

Classification of Cash Flows (Cash inflows and cash outflows.)

1. **Operating Activities** Cash flow activities that include the cash effects of transaction that creates revenues and expenses and thus enter into the determination of net income.
2. **Investing Activities** Cash flow activities that include the acquiring and selling of long-term assets, the acquiring and selling of marketable securities other than cash equivalents and the making and collecting of loans.
3. **Financing Activities:** Business activities that involve obtaining resources from or returning resources to owners and providing them with a return on their investment, and obtaining resources from creditors and repaying the amounts borrowed or otherwise settling the obligations.


Cash Inflows
Activities
Cash Out flows
From sales of goods and services to customers
From receipts of interest or dividends on loans or investment
From sale of trading securities
Operating Activities
To pay wages
To purchase inventory
To pay interest
To pay taxes
To purchase trading securities
From sale of Property, Plant and equipment and other long- term investment
From sale of long or short term held-to-maturity and available for sale securities investment
From collection of loans
Investing Activities
To purchase Property, Plant and equipment and other long- term assets
To purchase of long or short term held-to-maturity and available for sale securities investment
To make loans
From sale of preferred or Common stock
From issuance of debt
Financing Activities
To reacquire preferred or
To repay debt
To pay dividends

Format of the Statement of Cash Flows

The three activities discussed above operating, investing, and financing plus the significant noncash investing and financing activities constitute the general format of the statement of cash flows.

COMPANY NAME
Statement of Cash Flows
Period Covered

Cash flows from operating activities		
(List of individual items)	xx	
Net Cash provided (used) by operating activities		xxx
Cash flows from investing activities		
(List of individual inflows and outflows)	xx	
Net Cash provided (used) by investing activities		xxx
Cash flows from financing activities		
(List of individual inflows and outflows)	xx	
Net Cash provided (used) by financing activities		xxx
Net increase (decrease) in cash		xxx
Cash at beginning of period		xxx
Cash end of period		xxx
Noncash investing and financing activities		
(List individual noncash transactions)		xxx

Reporting Cash Flows from Operations

- Direct Method—A method of reporting net cash flows from operations that shows cash receipts and payments for a period of time. This method is more straight forward.
- Indirect Method—A method of reporting net cash flow from operations that involves reconciling net income to a cash basis. It shows how noncash flows affect net income.
- The indirect method makes the following adjustments:
- Adjustments for receivables and other current operating assets.
- Adjustments for payables and other current liabilities.
- Adjustments for depreciation and other noncash items.
- Adjustments for gains and losses.

Schedule of Cash Flows from Operating Activities (Indirect Method)

Summary of Adjustments The effects of items on the income statement that do not affect cash flows may be summarized as follows:

	Add to or Deduct From Net Income
Depreciation Expense	Add
Amortization Expense	Add
Depletion Expense	Add
Losses	Add
Gains	Deduct

The adjustments for increases and decreases in current assets and current liabilities may be summarized as follows:

	Add to Net Income	**Deduct from Net Income**
Current Assets		
Accounts Receivable (net)	Decrease	Increase
Inventory	Decrease	Increase
Prepaid Expense	Decrease	Increase
Current Liabilities		
Accounts Payable	Increase	Decrease
Accrued Liabilities	Increase	Decrease
Income Taxes Payable	Increase	Decrease

Short Formulas

$$\begin{aligned}&\text{Net income}\\&+\text{Depreciation}\\&+\text{Losses}\\&-\text{Gains}\\&+\text{Decrease in CA}\\&-\text{Increase In CA}\\&+\text{Increase in CL}\\&-\text{Decrease in CL}\\&= \textit{Net Cash Flows from Operating Activities}\end{aligned}$$

THE DIRECT METHOD OF PREPARING THE STATEMENT OF CASH

Determining Cash Flows from Operating Activities

- Cash Receipts from Sales $= Sales\begin{cases}+\textit{Decrease in Accounts Receivable}\\-\textit{Increase in Accounts Receivable}\end{cases}$

- Cash Payments for purchases $= COGS\begin{cases}+\textit{Increase in Inventory}\\-\textit{Decrease in Inventory}\end{cases}\begin{cases}+\textit{Decrease in Accounts Payable}\\-\textit{Increase in Accounts Payable}\end{cases}$

- Cash Payments From Operating Expenses

$$\text{From Operating} = \textit{Operating Expenses}\begin{cases} +\textit{Increase in Prepaid Expenses} \\ -\textit{Decrease in Prepaid Expsnses} \end{cases}\begin{cases} +\textit{Decrease in Accrued Liabilities} \\ -\textit{Increase in Accrued Liabilities} \end{cases}\begin{cases} -\textit{ Depreciation and Other Noncash Expenses} \end{cases}$$

- Cash Payments for Incomes Taxes

$$= \textit{Income Taxes}\begin{cases} +\textit{Decrease in Income Taxes Payable} \\ -\textit{Increase in Income Taxes Payable} \end{cases}$$

How to prepare Statement of Cash Flows

☞ *Income Statement*

☞ *Comparative Balance sheet*

☞ *Additional Information*

Example:

Comparative Balance Sheet

Assets	**2005**	**2004**
Cash and Cash Equivalents	$ 82	$ 40
Accounts Receivable	180	150
Inventory	170	200
Equipment	200	140
Accumulated Depreciation	(72)	(60)
Total Assets	$560	$470
Liabilities and Equity		
Accounts Payable	$100	$ 80
Long-term Notes Payable	100	50
Common Stock	250	250
Retained Earnings	110	90
Total Liabilities and Equity	$560	$470

Income Statement, 2005

Sales		$345
Expenses:		
Cost of goods sold	$120	
Selling and general expense	58	
Depreciation	20	
Interest expense	2	(200)
Operating income		$145
Gain from sale of equipment		5
Income before income taxes		$140
Income tax expense		30
Net income		$110

Solution

Indirect Method

Cash Flows from Operating Activities:	
Net income	$110
Adjustments:	
Depreciation expense	44
Gain on sale of equipment	(5)
Increase in accounts receivable	(30)
Decrease in inventory	30
Increase in accounts payable	20
Net Cash Provided by Operating Activities	$169

Cash Flows from Investing Activities:	
Proceeds from sale of equipment	$ 33
Purchase of equipment	(120)
Net cash provided by investing activities	(87)
Cash Flows from Financing Activities:	
Issuance of long-term notes payable	50
Payment of cash dividends	(90)
Net cash used for financing activities	(40)
Net increase in cash	42
Cash, January 1, 2005	40
Cash, December 31, 2005	82

ANALYZING THE STATEMT OF CASH FLOWS

Earnings do not typically equal net cash flows, except over the life of a company. Because accrual accounting yields numbers different from cash flow accounting, and we know that cash flows are important in business decisions, there is a need for reporting on cash inflows and outflows. For example, analyses involving reconstruction and interpretation of business transactions often require the statement of cash flows. Also, certain valuation models use cash flows. The statement of cash flows reports cash inflows and outflows separately for a company's operating, investing, and financing activities over a period of time.

Like the other financial statements, the statement of cash flows can be analyzed to reveal significant relationships. Two areas analysts examine when studying a company are cash-generating efficiency and free cash flow.

Cash-generating efficiency

Cash-generating efficiency is the ability of a company to generate cash from its current or continuing operations. Three ratios are helpful in measuring cash-generating efficiency: Cash flow yield, cash flows to sales, and cash flows to assets.

Cash flow yield

The ratio of net cash flows from operating activities to net income.

Cash flow yield

$$= \frac{net\ cash\ flows\ from\ operating\ activities}{net\ income}$$

$$Cash\ \ flow\ yield = \frac{\$30{,}000}{\$16{,}000} = 1.9\ times$$

Ryan Corporation provides a good cash flow yield of 1.9 times. This means that operating activities are generating almost twice as much cash flow as net income. If special items that are material appear on the income statement, such as discontinued operations, income from continuing operations should be used as the denominator.

Cash flows to sales

The ratio of net cash flows from operating activities to sales.

$$\text{Cash flows to sales } = \frac{net\ cash\ \ flows\ \ from\ operating\ \ activities}{net\ \ sales}$$

$$Cash\ \ flows\ \ to\ \ sales = \frac{\$30{,}000}{\$698{,}000} = 4.3\%$$

Ryan Corporation generates cash flows to sales of only 4.3 percent. This means that the company is not generating much cash from sales.

Cash flows to assets

The ratio of net cash flows from operating activities to average total assets.

$$Cash\ \ flows\ to\ assets = \frac{\text{net cahs flows from operating activities}}{\text{average total assets}}$$

$$\text{Cash flows to assets} = \frac{\$30{,}000}{(\$749{,}000 + \$965{,}000) \div 2} = 3.5\%$$

The cash flows to assets is even lower than cash flows to sales because **Ryan Corporation** has a poor asset turnover (sales ÷ average total assets) of less than 1.0 times. Cash flows to sales and cash flows to assets are closely related to the profitability measures profit margin and return on assets. They exceed those measures by the amount of the cash flow yield ratio because cash flow yield is the ratio of net cash flows from operating activities to net income. Although **Ryan Corporation's** cash flow yields relatively strong, the other two ratios show that its efficiency at generating cash flows from operating activities is low.

Free Cash Flow

The amount of cash that remains after deducting the funds a company must commit to continue operating at its planned level; net cash flow from operating activities minus dividends minus net capital expenditures.

If free cash flow is positive, it means that the company hat met all of its planned cash commitments and cash available to reduce debt or expand.

A negative free cash flow means that the company will have to sell investments, borrow money, or issue stock in the short-term to continue at its planned levels. If free cash flow remains negative for several years, a company may not be able to raise cash by selling investments or issuing stock or bonds.

Free Cash

$$\text{Flow} = \textit{net cash flows from operating activities} - \textit{dividends} - \textit{purchases of plant assets} + \textit{sales of plant assets}$$

$$\$30{,}000 - \$8{,}000 - \$120{,}000 + \$5{,}000 = (\$93{,}000)$$

Balance Sheet

- **Fundamental identity**
  - **Assets = Liabilities + Equity**
- If a firm has assets of $100 and liabilities of $30, how much does it have in owner's equity?

  $100 - $30 = $70

Figure 7.1 Borg Corporation 2535-36 Balance Sheets

	Year 2536	Year 2535
Current Assets:		
Cash	$2,000	$1,356
Accounts Receivable	$1,200	$1,200
Prepaid Expenses	$500	$500
Materials & Supplies	$300	$300
Inventory	$6,000	$6,000
Total Current Assets	$10,000	$9,356
Fixed Assets:		
Plant Facilities	$35,000	$35,000
Production Equipment	$20,000	$20,000
Administrative Facilities	$15,000	$15,000
Patents	$10,000	$10,000
Accumulated Depreciation	($20,000)	($17,000)
Total Fixed Assets	$60,000	$63,000
Investments:		
Cardassian Mining		
7% Preferred Stock	$10,000	$10,000
Klingon Enterprises		
Common Stock	$10,000	
Goodwill	$5,000	
Total Investments	$25,000	$10,000
Other Assets	$5,000	$5,000
Total Assets	$100,000	$87,356

	Year 2536	Year 2535
Current Liabilities:		
Short term debt	$10,000	$10,000
Accounts payable	$2,000	$2,000
Leasing obligations	$3,000	$3,000
Total Current Liabilities	$15,000	$15,000
Long Term Debt	$30,000	$20,000
Other Liabilities	$5,000	$5,000
Total Liabilities	$50,000	$40,000
Stockholder Equity:		
Paid-In Capital	$10,000	$10,000
Retained Earnings	$40,000	$37,356
Total Stockholder Equity	$50,000	$47,356
Total Liabilities and Equity	$100,000	$87,356
Shares outstanding	2,000	2,000
Year-end stock price	$40	$36

Income Statement

- **Reports revenues and expenses**
- **Fundamental identities**
    - **Net income = Revenues - expenses**
    - **Net income = Dividends + retained earnings**

Figure 7.3 Borg Corporation Condensed Income Statement

Net Sales	$90,000	$90,000
Cost of Goods Sold	($70,000)	-$70,000
Gross Profit	$20,000	$20,000
Operating Expenses	($13,000)	-$13,000
Operating Income	$7,000	$7,000
Investment Income	$700	$700
Interest Expense	($2,000)	-$2,000
Pre-Tax Income	$5,700	$5,700
Income Taxes1	($2,056)	-$2,056
Net Income	$3,644	$3,644
Dividends	($1,000)	-$1,000
Retained Earnings	$2,644	$2,644

Cash Flow Statement

- Reports where cash was generated and where it was used
- Three categories:
    - Operating cash flows
    - Investment cash flows
    - Financing cash flows
- The bottom line . . .
    - How much cash flowed into or out of the company

Figure 7.4 Borg Corp. Condensed Cash Flow Statement

Net Income	$3,644	$3,644
Depreciation	$3,000	$3,000
Operating Cash Flow	$6,644	$6,644
Investment Cash Flow	($15,000)	-$15,000
Financing Cash Flow	$9,000	$9,000
Net Cash Flow	$644	$644

Profitability Ratios

- **Gross Margin**
    - **Gross profit / Sales**
- **Operating Margin**
    - **Operating income / Sales**
- **ROA**
    - **Net income / Total assets**
- **ROE**
    - **Net income / Owner's equity**

Profitability Measures for Borg Corporation

- Gross margin = $20/90 = 22.2%
- Operating margin = $7/90 = 7.8%
- ROA = $3,644/100,000 = 3.644%
- ROE = $3,644/50,000 = 7.288%

Per Share Calculations

- Book Value Per Share (BVPS)
    - Total equity / # shares outstanding
- Earnings Per Share (EPS)
    - Net income / # shares outstanding
- Cash Flow Per Share (CFPS)
    - Operating cash flow / # shares outstanding

Market Value Ratios

- Price / Book (or Market / Book)
    - Stock price / BVPS
- Price / Earnings (P/E)
    - Stock price / EPS
- Price / Cash flow (P/CF)
    - Stock price / CFPS

Market Value Ratios for Borg Corporation

- Per share measures (2,000 shares)
    - BVPS = $50/2 = $25
    - EPS = $3,644/2,000 = $1.82
    - CFPS = $6,644/2,000 = $3.32
- Price ratios (P = $40)
    - P/B = $40/25 = 1.6
    - P/E = $40/1.82 = 22
    - P/CF = $40/3.32 = 12

Financial Statement Forecasting

- Pro Forma Financial Statements:
    - Statements prepared using assumptions about future income and expenses, cash flow, and other items.
    - Pro Forma Income Statement
    - Pro Forma Cash Flow Statement
    - Pro Forma Balance Sheet
    - Use pro formas to compute projected profitability and price ratios, which are used to predict stock prices based on various scenarios

Dixie Chickens 2000 Balance Sheet

Data for Problems 7-16 through 7-20

Cash and Cash Equivalents	$100
Operating Assets	$300
Property, Plant, Equipment	$800
Other Assets	$40
Total Assets	$1,240
Current Liabilities	$100
Long-Term Debt	$400
Other Liabilities	$20
Total Liabilities	$520
Paid-In Capital	$30
Retained Earnings	$690
Total Shareholder Equity	$720
Total Liabilities and Equity	$1,240

Dixie Chickens 2000 Income Statement

Data for Problems 7-16 through 7-20

Net Sales	$2,480
Cost of gooods Sold	($1,660)
Gross Profit	$820
Operating Expenses	($600)
Operating Income	$220
Other Income	$90
Net Interest Expense	($70)
Pre-Tax Income	$240
Income Tax	$96
Net Income	$144
Earnings per Share	$1.20
Shares Outstanding	120,000
Recent Price	$24

Dixie Chickens 2000 Cash Flow Statement

Data for Problems 7-16 through 7-20

Net Income	$144
Depreciation and Amortization	$100
Changes in Operating Assets	($50)
Changes in Current Liabilities	$40
Operating Cash flow	$234
Net Additions to Properties	($200)
Changes in Other Assets	($40)
Investing Cash Flow	($240)
Issuance/Redemption of Long-Term Debt	$94
Dividends Paid	($72)
Financing Cash Flow	$22
Net Cash Flow	$16

Problem 7-18 Market Value Ratios

- Per share measures (120,000 shares)
    - BVPS = $720/120 = $6
    - EPS = $144/120 = $1.20
    - CFPS = $234/120 = $1.95
- Price ratios (P = $24)
    - P/B = $24/6 = 4
    - P/E = $24/1.2 = 20
    - P/CF = $24/1.95 = 12.31

Dixie Chickens 2001 pro forma Income Statement

Solution for Problem 7-19

Net Sales	$2,728
Cost of gooods Sold	($1,826)
Gross Profit	$902
Operating Expenses	($600)
Operating Income	$302
Other Income	$90
Net Interest Expense	($70)
Pre-Tax Income	$322
Income Tax	$129
Net Income	$193
Earnings per Share	$1.61
Shares Outstanding	120,000
Recent Price	n/a

Dixie Chickens 2001 pro forma Cash Flow Statement

Solution for Problem 7-19

Net Income	$193
Depreciation and Amortization	$100
Changes in Operating Assets	($50)
Changes in Current Liabilities	$40
Operating Cash flow	$283
Net Additions to Properties	$0
Changes in Other Assets	$0
Investing Cash Flow	$0
Issuance/Redemption of Long-Term Debt	
Dividends Paid	($72)
Financing Cash Flow	($72)
Net Cash Flow	$211

Dixie Chickens 2001 pro forma Balance Sheet

Solution for Problem 7-19

Cash and Cash Equivalents	$311
Operating Assets	$350
Property, Plant, Equipment	$700
Other Assets	$40
Total Assets	$1,401
Current Liabilities	$140
Long-Term Debt	$400
Other Liabilities	$20
Total Liabilities	$560
Paid-In Capital	$30
Retained Earnings	$811
Total Shareholder Equity	$841
Total Liabilities and Equity	$1,401

Pro Forma per Share Measures

- BVPS = $841/120 = $7
- EPS = $193/120 = $1.61
- CFPS = $283/120 = $2.358

Price Projections

- Based on book value:
  - BVPS x P/B = ($7.00) x 4 = $28
- Based on EPS:
  - EPS x P/E = $1.61 x 20 = $32.20
- Based on CFPS:
  - CFPS x P/CF = $2.358 x 12.31 = $29.03

Notes:

Sources of Information

- **Annual reports**
- ***Wall Street Journal***
- **Internet**
    - **NYSE (www.nyse.com)**
    - **Nasdaq (www.nasdaq.com)**
    - **Text (www.mhhe.com/cj)**

SEC

- **EDGAR**
- **10K & 10Q reports**

Review Problem and Solution

2-112.) Alegre Retail Corporation's most recent comparative Balance Sheet is as follows:

	Ending	Beginning
Assets		
Cash	$ 7,000	$ 12,000
Accounts receivable, net	11,000	2,000
Merchandise inventory	39,000	24,000
Long-term investments	23,000	9,000
Equipment	83,000	100,000
Accumulated depreciation	(66,000)	(62,000)
Total assets	$97,000	$ 85,000
Liabilities and Stockholders' Equity		
Accounts payable	$ 9,000	$28,000
Taxes payable	1,000	2,000
Notes payable	16,000	10,000
Common stock	42,000	30,000
Retained earnings	29,000	15,000
Total liabilities and stockholders' equity	$97,000	$85,000

Alegre's net income was $34,000. No direct exchange transactions occurred at Alegre during the year. No equipment was purchased. There was a gain of $3,000 when equipment was sold. The accumulated depreciation on the equipment sold was $12,000. Cash dividends of $20,000 were declared and paid during the year. Alegre uses the indirect method to prepare its statement of cash flows.

Required:

Prepare Alegre's statement of cash flows.

Solution

Operating activities:

Net income		$34,000
Adjustments:		
Increase in accounts receivable	$(9,000)	
Increase in merchandise inventory	(15,000)	
Depreciation ($4,000 + $12,000)	16,000	
Decrease in accounts payable	(19,000)	
Decrease in taxes payable	(1,000)	
Gain on sale	(3,000)	(31,000)
Net cash provided by operating activities		3,000
Investing activities:		
Increase in investments	(14,000)	
Sale of equipment ($17,000 + $3,000 – $12,000)	8,000	
Net cash used in investing activities		(6,000)
Financing activities:		
Increase in notes payable	6,000	
Increase in common stock	12,000	
Dividends paid	(20,000)	
Net cash used in financing activities		(2,000)
Decrease in cash		(5,000)
Cash, beginning		12,000
Cash, ending		$ 7,000

Problems

I.True/False Questions

2-1) An increase in long-term notes payable is considered to be a financing activity and
a source of cash on the statement of cash flows.

2-2) Under the indirect method of determining the net cash provided by operating activities on the statement of cash flows, an increase in accounts receivable would be deducted from net income to arrive at net cash provided by financing activities.

2-3) A loss on the sale of an asset would be deducted from net income in computing cash from operating activities under the indirect method on the statement of cash flows.

2-4) under the indirect method of determining the net cash provided by operating activities on the statement of cash flows, an increase in accounts payable would be recorded as a deduction from net income.

2-5). Under the indirect method of determining the net cash provided by operating activities on the statement of cash flows, an increase in inventory would be added to net income.

2-6) In computing the net cash provided by operating activities under the indirect method on the statement of cash flows, a decrease in accounts payable would be added to net income.

II. Multiple Choice Questions

2-36.) Frizz Hair Salon had net income of $93,000 for the year just ended. Frizz collected the following additional information to prepare its statement of cash flows for the year:

Increase in accounts receivable $10,000
Decrease in accounts payable $2,000
Increase in retained earnings $31,000
Cash received from sale of equipment $18,000
Loss on sale of equipment $5,000
Depreciation expense $16,000

Frizz uses the indirect method to prepare its statement of cash flows. What is Frizz's net cash provided (used) by operating activities?

A) $92,000
B) $102,000
C) $120,000
D) $126,000

2-37.) Majorn Auto Parts Store had net income of $81,000 for the year just ended. Majorn collected the following additional information to prepare its statement of cash flows for the year:

Increase in accounts receivable $102,000
Decrease in merchandise inventory $18,000
Decrease in accounts payable $35,000
Increase in retained earnings $29,000
Cash received from sale of building $215,000
Gain on sale of building $47,000
Depreciation expense $32,000

Majorn uses the indirect method to prepare its statement of cash flows. What is Majorn's net cash provided (used) by operating activities?

A) $41,000
B) $(53,000)
C) $185,000
D) $279,000

2-41.) Klutz Dance Studio had net income of $167,000 for the year just ended. Klutz collected the following additional information to prepare its statement of cash flows for the year:

Decrease in accounts receivable $24,000
Increase in accounts payable $11,000
Increase in retained earnings $92,000
Cash paid for purchase of new music equipment $20,000
Depreciation expense $5,000

Klutz uses the indirect method to prepare its statement of cash flows. What is Klutz's net cash provided (used) by operating activities?

A) $95,000
B) $137,000
C) $185,000
D) $207,000

Use the following to answer questions 68-69:
Samarium Retail Corporation's most recent comparative Balance Sheet is as follows:

	Ending	*Beginning*
Assets		
Cash	$ 51,000	$ 64,000
Accounts receivable, net	83,000	41,000
Merchandise inventory	96,000	87,000
Equipment	120,000	120,000
Accumulated depreciation	(65,000)	(50,000)
Total assets	$285,000	$262,000
Liabilities and Stockholders' Equity		
Accounts payable	$ 12,000	$ 38,000
Taxes payable	1,000	3,000
Notes payable	30,000	5,000
Common stock	100,000	80,000
Retained earnings	142,000	136,000
Total liabilities and stockholders' equity	$285,000	$262,000

Samarium's net income was $46,000. No direct exchange transactions occurred at Samarium during the year. No equipment was sold or purchased. Cash dividends of $40,000 were declared and paid. Samarium uses the indirect method to prepare its statement of cash flows.

2-68.) what is Samarium's net cash provided (used) by operating activities?

A) $(18,000)
B) $(33,000)
C) $69,000
D) $84,000

2-69.) what is Samarium's net cash provided (used) by investing activities?

A) $0
B) $(15,000)

C) $25,000
D) $45,000

Use the following to answer questions 70-71:
Chenay Service Corporation's most recent comparative Balance Sheet is as follows:

	Ending	Beginning
Assets		
Cash	$ 59,000	$ 70,000
Accounts receivable, net	108,000	82,000
Prepaid expenses	10,000	4,000
Equipment	350,000	300,000
Accumulated depreciation	(50,000)	(40,000)
Total assets	$477,000	$416,000
Liabilities and Stockholders' Equity		
Accounts payable	$ 29,000	$ 16,000
Notes payable	78,000	90,000
Common stock	225,000	200,000
Retained earnings	145,000	110,000
Total liabilities and stockholders' equity	$477,000	$416,000

Chenay's net income was $35,000. No direct exchange transactions occurred at Chenay during the year. No equipment was sold and no dividends were paid during the year. Chenay uses the indirect method to prepare its statement of cash flows.

2-70.) what is Chenay's net cash provided (used) by operating activities?
A) $16,000
B) $26,000
C) $80,000
D) $90,000

2-71.) what is Chenay's net cash provided (used) by financing activities?
A) $13,000
B) $25,000
C) $(37,000)
D) $(62,000)

Use the following to answer questions 72-74:
Waste Company's comparative balance sheet and income statement for last year appear below: Statement of Financial Positio

\

	Ending Balance	Beginning Balance
Cash	$ 60,000	$ 22,000
Accounts receivable	40,000	54,000
Inventory	43,000	61,000
Prepaid expenses	22,000	10,000
Long-term investments	260,000	200,000
Plant and equipment	480,000	480,000
Accumulated depreciation	(257,000)	(222,000)
Total assets	$648,000	$605,000
Accounts payable	$ 32,000	$ 50,000
Accrued liabilities	51,000	25,000
Taxes payable	34,000	24,000
Bonds payable	120,000	160,000
Deferred taxes	28,000	16,000
Common stock	180,000	150,000
Retained earnings	203,000	180,000
Total liabilities and owners' equity	$648,000	$605,000

Income Statement

Sales	$600,000
Less cost of goods sold	340,000
Gross margin	260,000
Less operating expenses	160,000
Net operating income	100,000
Less income taxes	30,000
Net income	$ 70,000

The company declared and paid $47,000 in cash dividends during the year. The following questions pertain to the company's statement of cash flows.

2-72). the net cash provided by (used in) operating activities last year was:

A) $(15,000)
B) $105,000
C) $70,000
D) $155,000

2-73). the net cash provided by (used in) investing activities last year was:

A) $(60,000)
B) $60,000
C) $(30,000)
D) $30,000

2-74.) the net cash provided by (used in) financing activities last year was:

A) $57,000
B) $(57,000)
C) $10,000
D) $(10,000)

P2-113)

Burns Company's net income last year was $91,000. Changes in the company's balance sheet accounts for the year appear below:

	Increases (Decreases)
Debit balances:	
Cash	$19,000
Accounts receivable	$13,000
Inventory	$(16,000)
Prepaid expenses	$4,000
Long-term investments	$10,000
Plant and equipment	$70,000
Credit balances:	
Accumulated depreciation	$31,000
Accounts payable	$(18,000)
Accrued liabilities	$16,000
Taxes payable	$(4,000)
Bonds payable	$(60,000)
Deferred taxes	$8,000
Common stock	$40,000
Retained earnings	$87,000

The company declared and paid cash dividends of $4,000 last year.

Required:

a. Construct in good form the operating activities section of the company's statement of cash flows for the year. (Use the indirect method.)
b. Construct in good form the investing activities section of the company's statement of cash flows for the year.
c. Construct in good form the financing activities section of the company's statement of cash flows for the year.

P2-114.

Burtch Company's net income last year was $112,000. Changes in the company's balance sheet accounts for the year appear below:

	Increases (Decreases)
Debit balances:	
Cash	$(14,000)
Accounts receivable	$(9,000)
Inventory	$16,000
Prepaid expenses	$(8,000)
Long-term investments..................	$40,000
Plant and equipment	$30,000
Credit balances:	
Accumulated depreciation.............	$36,000
Accounts payable	$18,000
Accrued liabilities..........................	$(5,000)
Taxes payable	$3,000
Bonds payable	$(40,000)
Deferred taxes...............................	$8,000
Common stock...............................	$20,000
Retained earnings	$15,000

The company declared and paid cash dividends of $97,000 last year.

Required:

a. Construct in good form the operating activities section of the company's statement of cash flows for the year. (Use the indirect method.)
b. Construct in good form the investing activities section of the company's statement of cash flows for the year.
c. Construct in good form the financing activities section of the company's statement of cash flows for the year.

P2-115.

The following information was collected from the most recent Income Statement and comparative Balance Sheet of Dolor Corporation:

Increase in cash $36,000
Decrease in accounts receivable $17,000
Increase in merchandise inventory $44,000
Decrease in prepaid rent $3,000
Increase in equipment $56,000
Increase in accumulated depreciation $18,000
Decrease in accounts payable $25,000
Increase in salaries payable $2,000
Increase in interest payable $1,000
Decrease in deferred income taxes $4,000
Increase in notes payable $12,000

Dolor's net income for the year was $167,000. No direct exchange transactions occurred at Dolor during the year. No equipment was sold during the year. Cash dividends of $30,000 were declared and paid during the year. Dolor uses the indirect method to prepare its statement of cash flows.

Required:

Prepare Dolor's operating activities section of its statement of cash flows.

P2-116.

Comparative balance sheets and the income statements for Ellis Company are presented below:

Ellis Company
Balance Sheets
December 31, Year 1 and Year 2

	Year 2	Year 1
Assets		
Current assets:		
Cash	$ 45,000	$ 30,000
Accounts receivable	38,000	40,000
Inventory	67,000	60,000
Total current assets	150,000	130,000
Long-term investments	162,000	200,000
Plant and equipment	278,000	150,000
Accumulated depreciation	(52,000)	(50,000)
Total assets	$538,000	$430,000
Liabilities and stockholders' equity		
Current liabilities:		
Accounts payable	$ 36,000	$ 40,000
Accrued liabilities	24,000	30,000
Total current liabilities	60,000	70,000
Bonds payable	20,000	30,000
Mortgage payable	100,000	
Deferred income taxes	15,000	20,000
Total liabilities	195,000	120,000
Stockholders' equity:		
Common stock	295,000	270,000
Retained earnings	48,000	40,000
Total stockholders' equity	343,000	310,000
Total liabilities and stockholders' equity	$538,000	$430,000

Ellis Company
Income Statement
For the Year Ended December 31, Year 2

Sales	$150,000
Less cost of goods sold	76,500
Gross margin	73,500
Less operating expenses	16,000
Net operating income	57,500
Less loss on sale of investment	2,500
Income before taxes	55,000
Less income taxes	22,000
Net income	$ 33,000

Summary of transactions for Year2:

* During Year 2, the company sold for cash of $35,500 long-term investments with a cost of $38,000 when purchased.

* All sales were on credit.
* The company paid a cash dividend of $25,000.
* Bonds payable of $25,000 was retired by issuing common stock. The bonds retired were equivalent to the market value of the $25,000 stock issued.
* An addition to one of the company's buildings was completed on December 31, Year 2, at a cost of $128,000. The company gave an interest-bearing mortgage for $100,000 and paid $28,000 in cash.
* Bonds payable were sold for $15,000 cash at par value.

Required:

Prepare a statement of cash flows for Year 2.

P2-121.

Daugherty Company's comparative balance sheet and income statement for last year appear below:

Statement of Financial Position

	Ending Balance	*Beginning Balance*
Cash	$ 7,000	$ 21,000
Accounts receivable	71,000	47,000
Inventory	62,000	44,000
Prepaid expenses	2,000	9,000
Long-term investments	310,000	240,000
Plant and equipment	370,000	370,000
Accumulated depreciation	(214,000)	(186,000)
Total assets	$608,000	$545,000
Accounts payable	$ 69,000	$ 48,000
Accrued liabilities	2,000	17,000
Taxes payable	28,000	13,000
Bonds payable	140,000	170,000
Deferred taxes	27,000	17,000
Common stock	90,000	70,000
Retained earnings	252,000	210,000
Total liabilities and owners' equity	$608,000	$545,000

Income Statement

Sales	$940,000
Less cost of goods sold	510,000
Gross margin	430,000
Less operating expenses	270,000
Net operating income	160,000
Less income taxes	48,000
Net income	$112,000

The company declared and paid $70,000 in cash dividends during the year.

Required:
a. Construct in good form the operating activities section of the company's statement of cash flows for the year.
b. Construct in good form the investing activities section of the company's statement of cash flows for the year.
c. Construct in good form the financing activities section of the company's statement of cash flows for the year.

P2-122.

Dawson Company's comparative balance sheet and income statement for last year appear below:

Statement of Financial Position

	Ending Balance	*Beginning Balance*
Cash	$ 49,000	$ 22,000
Accounts receivable	50,000	71,000
Inventory	84,000	52,000
Prepaid expenses	17,000	13,000
Long-term investments	240,000	180,000
Plant and equipment	430,000	430,000
Accumulated depreciation	(277,000)	(237,000)
Total assets	$593,000	$531,000
Accounts payable	$ 43,000	$ 61,000
Accrued liabilities	33,000	19,000
Taxes payable	37,000	25,000
Bonds payable	110,000	160,000
Deferred taxes	31,000	19,000
Common stock	70,000	50,000
Retained earnings	269,000	197,000
Total liabilities and owners' equity	$593,000	$531,000

Income Statement

Sales	$680,000
Less cost of goods sold	300,000
Gross margin	380,000
Less operating expenses	250,000
Net operating income	130,000
Less income taxes	39,000
Net income	$ 91,000

The company declared and paid $19,000 in cash dividends during the year.

Required:

a. Construct in good form the operating activities section of the company's statement of cash flows for the year.
b. Construct in good form the investing activities section of the company's statement of cash flows for the year.
c. Construct in good form the financing activities section of the company's statement of cash flows for the year.

P2-Needles1)

Comparative Balance sheets with Changes in Accounts indicated for **Ryan Corporation**

Ryan Corporation
Comparative Balance sheet
December 31, 20X1 and 20X2

Cash	$ 46,000	$ 15,000	$ 31,000
A/R (net)	$ 47,000	$ 55,000	$ (8,000)
Inventory	$ 144,000	$ 110,000	$ 34,000
Prepaid Expense	$ 1,000	$ 5,000	$ (4,000)
Total Current Assets	$ 238,000	$ 185,000	$ 53,000
Investments	$ 115,000	$ 127,000	$ (12,000)
Plant Assets			$ -
Plant Assets	$ 715,000	$ 505,000	$ 210,000
Accumulated Depreciation	$ (103,000)	$ (68,000)	$ (35,000)
Total Plant Assets	$ 612,000	$ 437,000	$ 175,000
Total Assets	**$ 965,000**	**$ 749,000**	**$ 216,000**
Liabilities			
Current Liabilities			
A/P	$ 50,000	$ 43,000	$ 7,000
Accrued Liabilities	$ 12,000	$ 9,000	$ 3,000
Income Taxes Payable	$ 3,000	$ 5,000	$ (2,000)
Total Current Liabilities	$ 65,000	$ 57,000	$ 8,000
Long-Term Liabilities			$ -
Bonds Payable	$ 295,000	$ 245,000	$ 50,000
Total Liabilities	$ 360,000	$ 302,000	$ 58,000
Stockholders' Equity			$ -
Common stock, $5 par value	$ 276,000	$ 200,000	$ 76,000
Paid-in Capital in Excess of Par Value			$ -
Common	$ 189,000	$ 115,000	$ 74,000
Retained Earnings	$ 140,000	$ 132,000	$ 8,000
Total Stockholders' Equity	$ 605,000	$ 447,000	$ 158,000
Total Liabilities and Stockholders' Equity	**$ 965,000**	**$ 749,000**	**$ 216,000**

Income statement and other information on Noncurrent accounts for Ryan Corporation

Ryan Corporation
Income statement
For the year Ended December 31,20X2

Net Sales			$	698,000
Cost of goods sold			$	520,000
Gross margin			$	178,000
Operating Expenses(including depre. Exp of $37,000)			$	147,000
Operating income			$	31,000
Other income (expenses)	$	(23,000)		
Interest income	$	6,000		
Gain on sale of Investment	$	12,000		
Loss on Sale of plant assets	$	(3,000)	$	(8,000)
Income before income taxes			$	23,000
Income taxes			$	7,000
Net income			***$***	***16,000***

Other transactions affecting noncurrent accounts during 20X2:

1. Purchased investments in the amount of $78,000.
2. Sold investments classified as long-term and available for sale for $102,000. These investments cost of $90,000.
3. Purchased plant asset in the amount of $120,000.
4. Sold plant assets that cost $10,000 with accumulated depreciation of $2,000 for $5,000.
5. Issued $100,000 of bonds at face value in a noncash exchange for plant assets.
6. Repaid $50,000 of bonds at face value at maturity.
7. Issued 15,200 shares of $5 par value common stock for $150,000.
8. Paid cash dividends in the amount of $8,000.

Required

1. **Prepare a statement of cash flows using the indirect method.**
2. **Compute and assess cash flows to sales, cash flows to assets, and free cash flow 20X2.**

P2-cj1)

Use the following income statement for Paul Bunyan Lumber Co. to calculate gross and operating margins.

Paul Bunyan Lumber
2003 Income Statement

Net Sales	$	8,000
Cost of goods sold	$	(6,400)
Gross profit	$	1,600
Operating expense	$	(400)
Operating income	$	1,200
Other income	$	80
Net interest expense	$	(120)
Pretax income	$	1,160
Income tax	$	464
Net income	$	696
Earnings per share	$	3.48
Recent price share	$	76.56

P2-cj2)

Use the following balance sheet for Paul Bunyan Lumber Co. along with the income statement in the previous question to calculate return on assets and return on equity.

Paul Bunyan Lumber
2003 Balance Sheet

Cash and Cash equivalents	$	400
Operating assets	$	400
Property, plant, and equipment	$	3,160
Other assets	$	216
Total assets	$	4,176
Current liabilities	$	720
Long-term debt	$	612
Other liabilities	$	60
Total liabilities	$	1,392
Paid-in capital	$	600
Retained earnings	$	2,184
Total shareholders' Equity	$	2,784
Total Liabilities and equity	$	4,176

P2-cj3)

Prepare a pro forma income statement for Paul Bunyan Lumber Co. assuming a 5 percent increase in sales. Based only on the pro forma income statement, what is the projected stock price? (Hint: What is the price- earnings ratio?)

P2-Needles-Solu)

The 20X2 income statement for Northwest Corporation is presented below and the comparative balance sheets for the years 20X2 and 20X1 are shown on the following page.

Northwest Corporation
Income Statement
For the Year Ended December 31, 20X2

Net Sales		$1,650,000
Cost of Goods Sold		920,000
Gross Margin		$ 730,000
Operating Expenses (including Depreciation Expense of $12,000 on Buildings and $23,100 on Equipment and Amortization Expense of $4,800)		470,000
Operating Income		$ 260,000
Other Income (Expense)		
Interest Expense	$ (55,000)	
Dividend Income	3,400	
Gain on Sale of Investments	12,500	
Loss on Disposal of Equipment	(2,300)	(41,400)
Income Befor Income Taxes		$ 218,600
Income Taxes		52,200
Net Income		$ 166,400

The following additional was taken from the company's records:

a. Long-term investments (available-for-sale securities) that cost $70,000 were sold at a gain of $12,500; additional long-term investments were made in the amount of $20,000.

b. Five acres of land were purchased for $25,000 to build a parking lot.

c. Equipment that cost $37,500 with accumulated depreciation of $25,300 was sold at a loss of $2,300; new equipment costing $30,000 was purchased.

d. Notes payable in the amount of $100,000 were repaid; an additional $30,000 was borrowed by signing notes payable.

e. Bonds payable in the amount of $100,000 were converted into 6,000 shares of common stock.

f. The Mortgage Payable account was reduced by $20,000 during the year.

g. Cash dividends declared and paid were $50,000.

Required: Prepare a shedule of cash flows from operating activities and cash flow statement using indirct method.

Northwest Corporation
Comparative Balance Sheets
December 31, 20X2 and 20X1

	20X2	20X1	Change
	Assets		
Cash	$ 115,850	$ 121,850	$ (6,000)
Accounts Receivable (net)	296,000	314,500	(18,500)
Inventory	322,000	301,000	21,000
Prepaid Expenses	7,800	5,800	2,000
Long-Term Investments	36,000	86,000	(50,000)
Land	150,000	125,000	25,000
Buildings	462,000	462,000	-
Accumulated Depreciation, Buildings	(91,000)	(79,000)	(12,000)
Equipment	159,730	167,230	(7,500)
Accumulated Depreciation, Equipment	(43,400)	(45,600)	2,200
Intagible Assets	19,200	24,000	(4,800)
Total Assets	$1,434,180	$1,482,780	$ (48,600)
	Laibilities and Stockholders' Equity		
Accounts Payable	$ 133,750	$ 233,750	$ (100,000)
Notes Payable (current)	75,700	145,700	(70,000)
Accrued Laibilities	5,000		5,000
Income Taxes Payable	20,000		20,000
Bond Payable	210,000	310,000	(100,000)
Mortageg Payable	330,000	350,000	(20,000)
Common Stock-$10 par value	360,000	300,000	60,000
Paid-in Capital in Excess of Par value	90,000	50,000	40,000
Retained Earnings	209,730	93,330	116,400
Total Laibilities and Stockholders' Equity	$1,434,180	$1,482,780	$ (48,600)

P2-18-7A weygandt)

The financial statements of Charlie Brown Company appear below:

CHARLIE BROWN COMPANY
Balance sheet
December 31, 2010

Assets	2,010	2,009	Changes
Cash	$25,000	$11,000	$14,000
Accounts receivable	22,000	33,000	-$11,000
Merchandisr inventory	20,000	29,000	-$9,000
Prepaid expenses	15,000	13,000	$2,000
Land	40,000	40,000	$0
Property, plant, and equipment	210,000	225,000	-$15,000
Less: Accumulated depreciation	(55,000)	(67,500)	$12,500
Total	**$277,000**	**$283,500**	-$6,500
Liabilities and Stockholders' Equity			
Accounts payable	$11,000	$18,500	-$7,500
Accrued expenses payable	9,500	7,500	$2,000
Interest payable	1,000	1,500	-$500
Income taxes payable	3,000	2,000	$1,000
Bonds payable	50,000	80,000	-$30,000
Common stock	125,000	105,000	$20,000
Retained earnings	77,500	69,000	$8,500
Total	**$277,000**	**$283,500**	-$6,500

CHARLIE BROWN COMPANY
Income statement
December 31, 2010

Revenues		
Sales	$600,000	
Gain on Sale of plant assets	2,500	$602,500
Less: Expenses		
Cost of goods sold	$500,000	
Operating expenses (excluding depreciation)	60,000	
Depreciation expense	7,500	
Interest expense	5,000	
Income tax expense	9,000	581,500
Net income		**$21,000**

Additional information:

1- Plant assets were sold at a sales price of $37,500.
2- Additional equipment was purchased at a cost of $40,000.
3- Dividends of $12,500 were paid.
4- All sales and purchases were on account.
5- Bonds were redeemed at face value.
6- Additional shares of stock were issued for cash.

Instructions

Prepare a statement of cash flows for Charlie Brown Company for the year ended December 31, 2010, using the indirect method.

P2-E14-10 weygandt

Comparative balance sheet for Eddie Murphy Company are presented below.

EDDIE MURPHY COMPANY
Comparative Balance
December 31

Assets	2008	2007
Cash	$63,000	$22,000
Accounts Receivable	85,000	76,000
Inventories	180,000	189,000
Land	75,000	100,000
Equipment	260,000	200,000
Accumulated Depreciation	(66,000)	(42,000)
Total	$597,000	$545,000

Liabilities and Stockholders' Equity		
Accounts Payable	$34,000	$47,000
Bonds Payable	150,000	200,000
Common Stock ($1 par)	214,000	164,000
Retained Earnings	199,000	134,000
Total	$597,000	$545,000

Additional information:

1. Net income for 2008 was $125,000
2. Cash dividends of $60,000 were declared and paid.
3. Bonds payable amounting to $50,000 were redeemed for cash $50,000
4. Common stock was issued for $50,000 cash.
5. Depreciation expense was $24,000
6. Sales for the year were $978,000

Instruction:

Prepare a statement of cash flows for 2008 using the indirect method.

End of Chapter 02

Chapter 03: Credit Analysis

ANALYSIS OBJECTIVES

- Explain the importance of liquidity, and describe working capital measures of liquidity and their components.
- Interpret the current ratio and cash-based measures of liquidity.
- Analyze operating cycle and turnover measures of liquidity and their interpretation.
- Illustrate what-if analysis for evaluating changes in company conditions and policies.
- Describe capital structure and its relation to solvency.
- Explain financial leverage and its implications for company performance and analysis.
- Analyze adjustments to accounting book values to assess capital structure.
- Describe analysis tools for evaluating and interpreting capital structure composition and for assessing solvency.
- Analyze asset composition and coverage for solvency analysis.
- Explain earnings-coverage analysis and its relevance in evaluating solvency.
- Describe capital structure risk and return and its relevance to financial statement analysis.
- Interpret ratings of organizations' debt obligations (Appendix 10A).
- Describe prediction models of financial distress (Appendix 10B).

Credit Analysis

Creditors lend funds to a company in return for a promise of repayment with interest.

This type of financing is temporary since creditors expect repayment of their funds with interest. Creditors lend funds in many forms and for a variety of purposes. **Trade** (or operating) **creditors** deliver goods or services to a company and expect payment within a reasonable period, often determined by industry norms. Most trade credit is short term, ranging from 30 to 60 days, with cash discounts often granted for early payment. Trade creditors do not usually receive (explicit) interest for an extension of credit. Instead, trade creditors earn a return from the profit margins on the business transacted. **Nontrade creditors** (or debtholders) provide financing to a company in return for a promise, usually in writing, of repayment with interest (explicit or implicit) on specific future dates. This type of financing can be either short or long term and arises in a variety of transactions.

In pure credit financing, an important element is the fixed nature of benefits to creditors.

That is, should a company prosper; creditors' benefits are limited to the debt contract's rate of interest or to the profit margins on goods or services delivered. However, creditors bear the *risk of default*. This means a creditor's interest and principal are jeopardized when a borrower encounters financial difficulties. This asymmetric relation of a creditor's risk and return has a major impact on the creditor's perspective, including the manner and objectives of credit analysis.

Credit analysis is the evaluation of the creditworthiness of a company. *Creditworthiness* is the ability of a company to honor its credit obligations. Stated differently, it is the ability of a company to pay its bills. Accordingly, the main focus of credit analysis is on risk, not profitability. Variability in profits, especially the sensitivity of profits to downturns in business, is more important than profit levels. Profit levels are important only to the extent they reflect the margin of safety for a company in meeting its obligations.

Credit analysis focuses on downside risk instead of upside potential. This includes analysis of both liquidity and solvency. **Liquidity** is a company's ability to raise cash in the short term to meet its obligations. Liquidity depends on a company's cash flows and the makeup of its current assets and current liabilities. **Solvency** is a company's long run viability and ability to pay long-term obligations. It depends on both a company's long-term profitability and its capital (financing) structure.

The tools of credit analysis and their criteria for evaluation vary with the term (maturity), type, and purpose of the debt contract. With short-term credit, creditors are concerned with current financial conditions, cash flows, and the liquidity of current assets. With long-term credit, including bond valuation, creditors require more detailed and forward-looking analysis. Long-term credit analysis includes projections of cash flows and evaluation of extended profitability (also called *sustainable earning power*).

Extended profitability is a main source of assurance of a company's ability to meet long-term interest and principal payments.

Credit analysis is the method by which one calculates the creditworthiness of a business or organization. The audited financial statements of a large company might be analyzed when it issues or has issued bonds. Or, a bank may analyze the financial statements of a small business before making or renewing a commercial loan. The term refers to either case, whether the business is large or small.

Credit analysis involves a wide variety of financial analysis techniques, including ratio and trend analysis as well as the creation of projections and a detailed analysis of cash flows. Credit analysis also includes an examination of collateral and other sources of repayment as well as credit history and management ability.

Before approving a commercial loan, a bank will look at all of these factors with the primary emphasis being the cash flow of the borrower. A typical measurement of repayment ability is the debt service coverage ratio. A credit analyst at a bank will measure the cash generated by a business (before interest expense and excluding depreciation and any other non-cash or extraordinary expenses). The debt service coverage ratio divides this cash flow amount by the debt service (both principal and interest payments on all loans) that will be required to be met. Commercial Bankers like to see debt service coverage of at least 120 percent. In other words, the debt service coverage ratio should be 1.2 or higher to show that an extra cushion exists and that the business can afford its debt requirements.

Typical education credentials often require a bachelor degree in business (to include an emphasis in accounting, finance or economics). An MBA is not required however is increasingly being held or pursued by analyst, often to become more competitive for advancement opportunities. Commercial Bankers also undergo intense credit training provided by their Bank or a third-party company.

- ***Credit Information***
  - Financial Statements
  - Credit Reports on Customer's Payment History with Other Firms
  - Banks
  - Customer's Payment History with the Firm
- ***Credit Scoring:***
  - The traditional 5 C's of credit
    - Character
    - Capacity
    - Capital
    - Collateral
    - Conditions
  - Some firms employ sophisticated statistical models

Liquidity and Working Capital

Basics

- **Liquidity -** Ability to convert assets into cash or to obtain cash to meet short-term obligations.
  • Short-term - Conventionally viewed as a period up to one year.
- **Working Capital** - The excess of current assets over current liabilities
- **Current Assets** - Cash and other assets reasonably expected to be (1) realized in cash, or (2) sold or consumed, during the longer of one-year or the operating cycle.

- **Current liabilities** - Obligations to be satisfied within a relatively short period, usually a year.
- **Working Capital** - Excess of current assets over current liabilities
  – Widely used measure of short-term liquidity
  – Constraint for technical default in many debt agreements

- **Current Ratio** – Ratio of Current Assets to Current Liabilities
  - Relevant measure of current liability coverage, buffer against losses, reserve of liquid funds.
  - Limitations – A static measure

Current Ratio

- **<u>Numerator Considerations</u>**
  - Adjustments needed to counter limitations such as:
    - Failure to reflect open lines of credit
    - Adjust securities' valuation since the balance sheet date
    - Reflect revolving nature of accounts receivable
    - Recognize profit margin in inventory
    - Adjust inventory values to market
    - Remove deferred charges of dubious liquidity from prepaid expenses
- **<u>Denominator Considerations</u>**
  - Payables vary with sales.
  - Current liabilities do not include prospective cash outlays.
- Liquidity depends to a large extent on prospective cash flows and to a lesser extent on the level of cash and cash equivalents.
- No direct relation between balances of working capital accounts and likely patterns of future cash flows.
- Managerial policies regarding receivables and inventories are directed primarily at efficient and profitable asset utilization and secondarily at liquidity.
- Two elements integral to the use of current ratio:
  - Quality of both current assets and current liabilities.
  - Turnover rate of both current assets and current liabilities.
- ***<u>Current Ratio - Applications</u>***
- **<u>Comparative Analysis</u>**
  - Trend analysis
- **<u>Ratio Management (window dressing)</u>**
  - Toward close of a period, management will occasionally press the collection of receivables, reduce inventory below normal levels, and delay normal purchases.
- **<u>Rule of Thumb Analysis (2:1)</u>**
  - Current ratio above 2:1 - superior coverage of current liabilities (but not too high - inefficient resource use and reduced returns)
  - Current ratio below 2:1 - deficient coverage of current liabilities
- **Note of caution**
  - Quality of current assets and the composition of current liabilities are more important in evaluating the current ratio.
  - Working capital requirements vary with industry conditions and the length of a company's net trade cycle.
- Net Trade Cycle Analysis

Illustration

Selected information from Technology Resources for the end of Year 1:

Sales for Year 1	$360,000
Receivables	40,000
Inventories*	50,000
Accounts payable†	20,000
Cost of goods sold (including depreciation of $30,000)	320,000

*Beginning inventory is $100,000.

†These relate to purchases included in cost of goods sold.

We estimate Technology Resources' purchases per day as:

Ending inventory	$ 50,000
Cost of goods sold	320,000
	370,000
Less: Beginning inventory	(100,000)
Cost of goods purchased and manufactured	270,000
Less: Depreciation in cost of goods sold	(30,000)
Purchases	$240,000

Purchases per day = $240,000/360 = $666.67

$$\text{Accounts receivable} = \frac{\$40{,}000}{\$360{,}000 \div 360} = \quad 40.00 \text{ days}$$

$$\text{Inventories} = \frac{\$50{,}000}{\$320{,}000 \div 360} = \quad \underline{56.24} \text{ days}$$

$$96.24 \text{ days}$$

$$\text{Less: Accounts payable} = \frac{\$20{,}000}{\$240{,}000 \div 360} = \underline{30.00} \text{ days}$$

$$\text{Net trade cycle (days)} = \quad \underline{\underline{66.24}} \text{ days}$$

Cash-Based Ratio Measures of Liquidity

- Cash to Current Assets Ratio

$$\frac{\text{Cash + Cash equivalents + Marketable securities}}{\text{Current Assets}}$$

  - Larger the ratio, the more liquid are current assets

- Cash to Current Liabilities Ratio

$$\frac{\text{Cash + Cash equivalents + Marketable securities}}{\text{Current Liabilities}}$$

  - Larger the ratio, the more cash available to pay current obligations

Operating Activity Analysis of Liquidity

Accounts Receivable Liquidity Measures

- Accounts Receivable Turnover

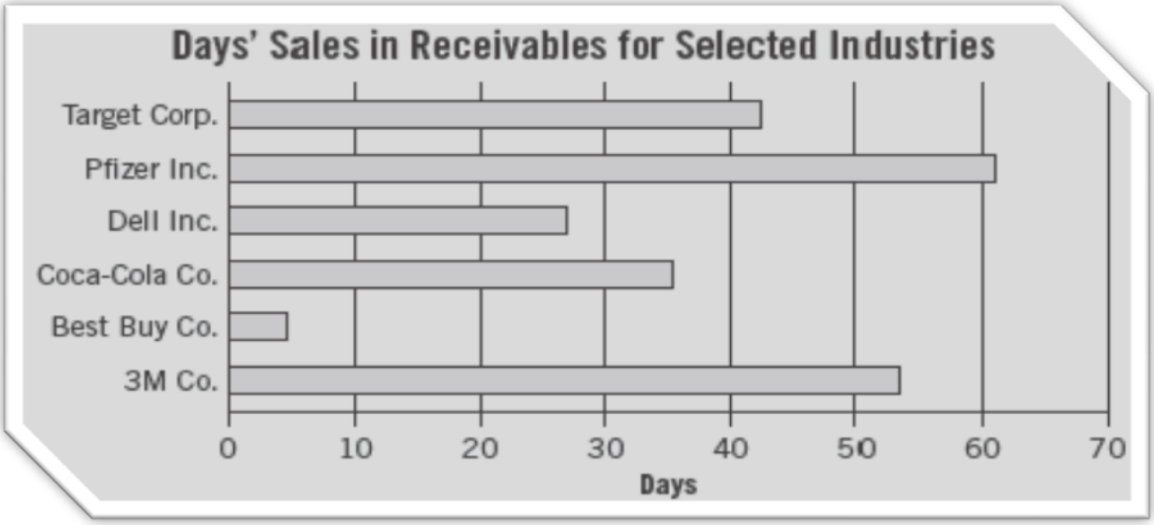
$$\frac{\text{Net sales on credit}}{\text{Average accounts receivable}}$$

- Days' Sales in Receivables

$$\text{Accounts receivable} \div \frac{\text{Sales}}{360}$$

- Receivables collection period

$$\frac{360}{\text{Accounts receivable turnover}}$$



Interpretation of Receivables Liquidity Measures

- Accounts receivable turnover rates and collection periods are usefully compared with industry averages or with credit terms.
- Ratio Calculation: Gross or Net?
- Trend Analysis
  - Collection period over time.
  - Observing the relation between the provision for doubtful accounts and gross accounts receivable.
- **Inventory Turnover Measures**
- Inventory turnover ratio: $\dfrac{\text{Cost of Goods Sold}}{\text{Average Inventory}}$
  - Measures the average rate of speed at which inventories move through and out of a company.
  - Days' Sales in Inventory: $\textit{Inventories} + \dfrac{\text{Cost of Goods Sold}}{360}$
  - Shows the number of days required to sell ending inventory
  - An alternative measure - Days to sell inventory ratio:

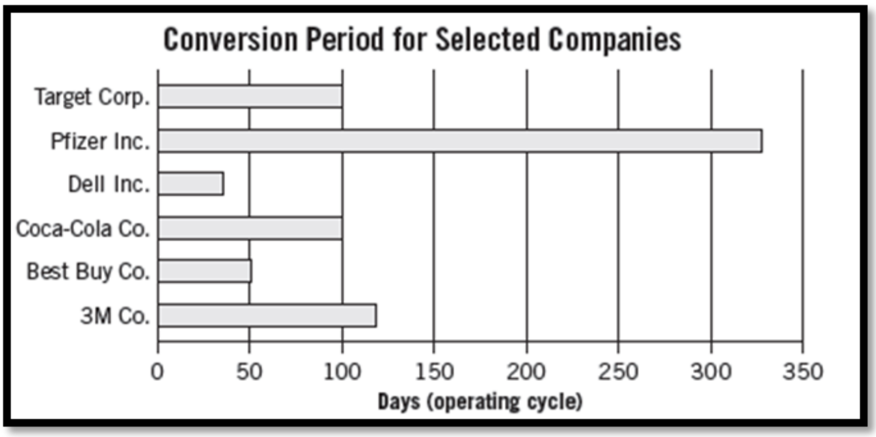
$$\frac{360}{\text{Inventory Turnover}}$$

Interpreting Inventory Turnover

- Quality of inventory
- Decreasing inventory turnover
    - Analyze if decrease is due to inventory buildup in anticipation of sales increases, contractual commitments, increasing prices, work stoppages, inventory shortages, or other legitimate reason.
- Inventory management
- Effective inventory management increases inventory turnover.
- Conversion period or operating cycle:

Days' sales in receivables..................	75
Days' sales in inventories	120
Conversion period	195

- Measure of the speed with which inventory is converted to cash



Liquidity of Current Liabilities

- Current liabilities are important in computing working capital and current ratio:
    - Used in determining whether sufficient margin of safety exists.
    - Deducted from current assets in arriving at working capital.
    - Quality of Current Liabilities
    - Must be judged on their degree of urgency in payment
    - Must be aware of unrecorded liabilities having a claim on current funds
- **Days' Purchases in Accounts Payable**
- Days' Purchases in Accounts Payable $\frac{Acconts\ Payable}{COGS \div 360}$
    - Measures the extent accounts payable represent current and not overdue obligations.
- Accounts Payable Turnover

$$\frac{COGS}{Average\ Accounts\ Payable}$$

– Indicates the speed at which a company pays for purchases on account.

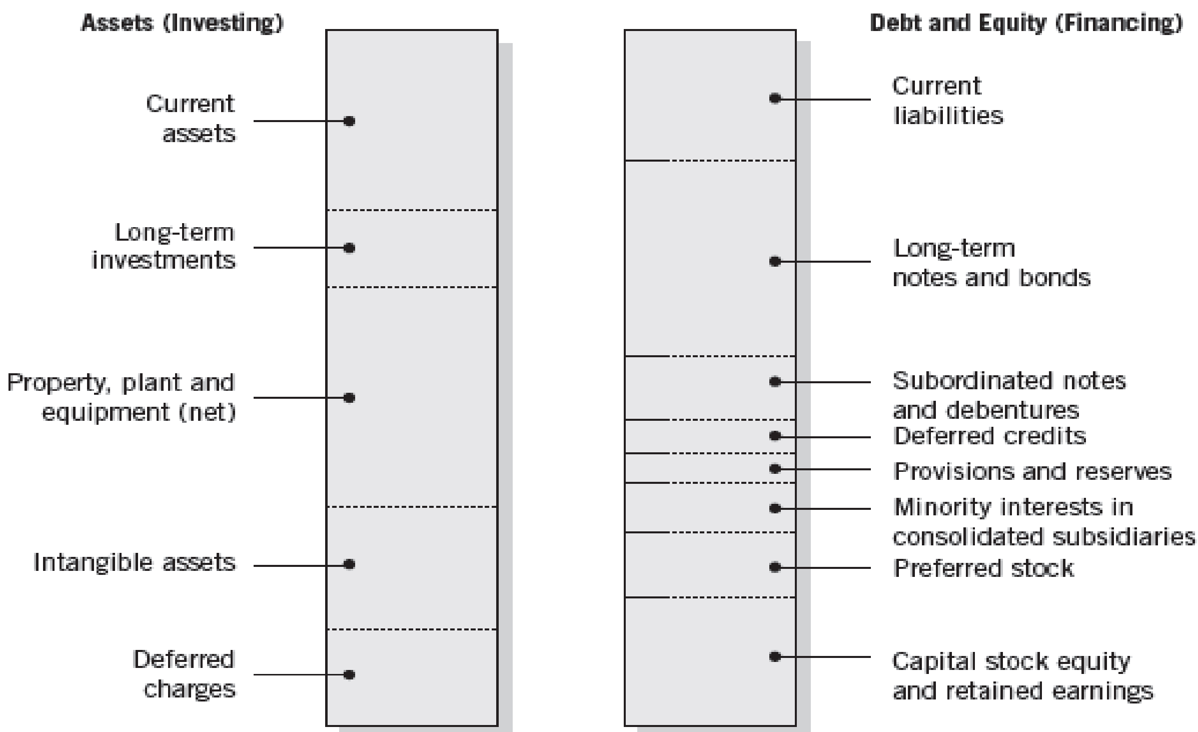
Basics of Solvency

- **Solvency** — long-run financial viability and its ability to cover long-term obligations
- **Capital structure** — financing sources and their attributes
- **Earning power** — recurring ability to generate cash from operations
- **Loan covenants** — protection against insolvency and financial distress; they define default (and the legal remedies available when it occurs) to allow the opportunity to collect on a loan before severe distress

Capital Structure

- Equity financing
  - Risk capital of a company
  - Uncertain and unspecified return
  - Lack of any repayment pattern
  - Contributes to a company's stability and solvency
- Debt financing
  - Must be repaid with interest
  - Specified repayment pattern
- When the proportion of debt financing is higher, the higher are the resulting fixed charges and repayment commitments

A Typical Company's Asset Distribution and Capital Structure



Motivation for Debt

- From a shareholder's perspective, debt is a preferred external financing source:
  - Interest on most debt is fixed
  - Interest is a tax-deductible expense

- **Financial leverage -** the amount of debt financing in a company's capital structure.
  – Companies with financial leverage are said to be trading on the equity.

Financial Leverage- Illustrating Tax Deductibility of Interest

Year 2	Risky, Inc.	Safety, Inc.
Income before interest and taxes	$100	$100
Interest (10% of $400)	(40)	0
Income before taxes	60	100
Taxes (40%)	(24)	(40)
Net income	36	60
Add back interest paid to bondholder	40	0
Total return to security holders (debt and equity)	$ 76	$ 60

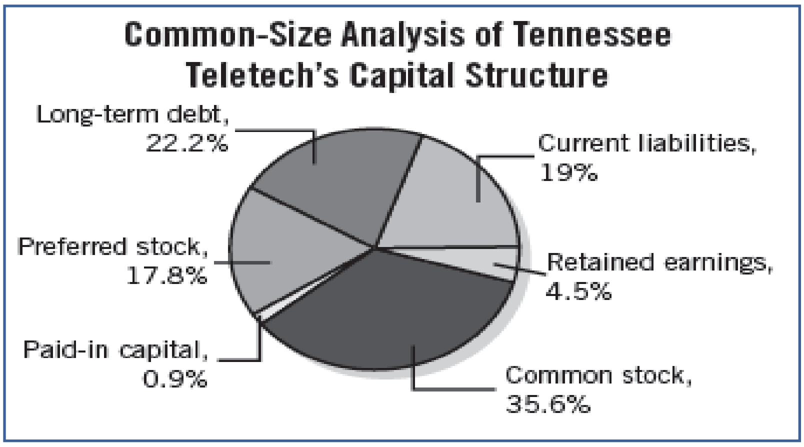
Capital Structure Composition and Solvency

Common-Size Statements in Solvency Analysis

- Composition analysis
  – Performed by constructing a common-size statement of the liabilities and equity section of the balance sheet.
  – Reveals relative magnitude of financing sources.

Tennessee Teletech's Capital Structure Common-Size Analysis

Current liabilities	$ 428,000	19 %
Long-term debt	500,000	22.2
Equity capital		
Preferred stock	400,000	17.8
Common stock	800,000	35.6
Paid-in capital	20,000	0.9
Retained earnings	102,000	4.5
Total equity capital	1,322,000	58.8
Total liabilities and equity	$2,250,000	100 %



Capital Structure Ratios

- Total Debt to Total Capital Ratio
  - Comprehensive measure of the relation between total debt and total capital
  - Also called Total debt ratio
- Total Debt to Equity Capital
- Long-Term Debt to Equity Capital
  - Measures the relation of LT debt to equity capital.
  - Commonly referred to as the debt to equity ratio.
- Short-Term Debt to Total Debt
  - Indicator of enterprise reliance on short-term financing.
  - Usually subject to frequent changes in interest rates.

Interpretation of Capital Structure Measures

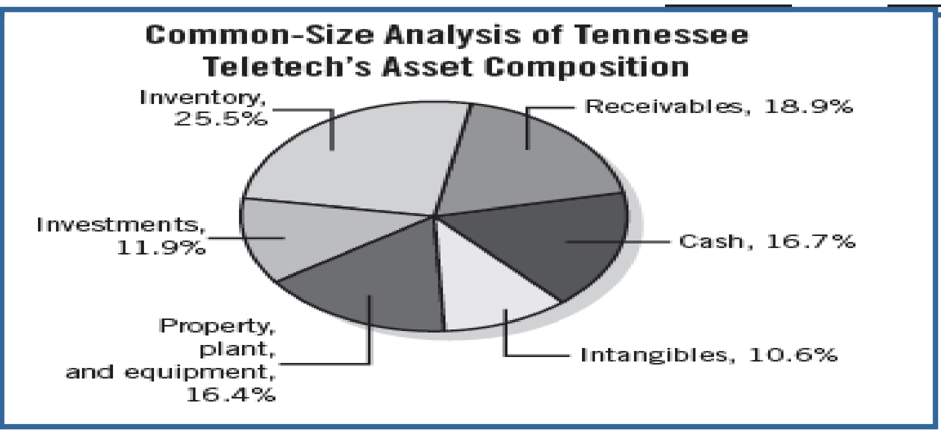
- Capital structure measures serve as *screening devices.*
- Further analysis required if debt is a significant part of capitalization.

Asset-Based Measures of Solvency

- Asset composition in solvency analysis
  - Important tool in assessing capital structure risk exposure.
  - Typically evaluated using common-size statements of asset balances.

Tennessee Teletech's Asset Composition: Common-Size Analysis

Current assets		
Cash	$ 376,000	16.7%
Accounts receivable (net)	425,000	18.9
Merchandise inventory	574,000	25.5
Total current assets	1,375,000	61.1
Investments	268,000	11.9
Property, plant, and equipment (net)	368,000	16.4
Intangibles	239,000	10.6
Total assets	$2,250,000	100.0%

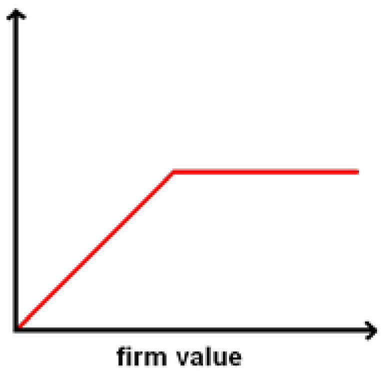


What is Financial Distress?

- A situation where a firm's operating cash flows are not sufficient to satisfy current obligations and the firm is forced to take corrective action.
- Financial distress may lead a firm to default on a contract, and it may involve financial restructuring between the firm, its creditors, and its equity investors.

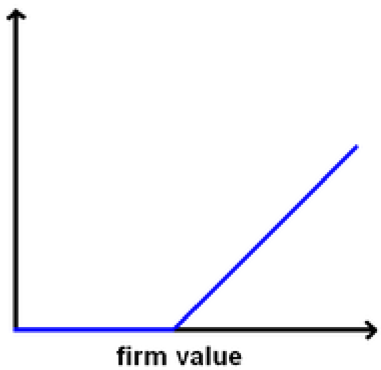
Financial distress is a term in Corporate Finance used to indicate a condition when promises to creditors of a company are broken or honored with difficulty. Sometimes financial distress can lead to bankruptcy. Financial distress is usually associated with some costs to the company; these are known as *costs of financial distress*.

A common example of a cost of financial distress is bankruptcy costs. These direct costs include auditors' fees, legal fees, management fees and other payments. Cost of financial distress can occur even if bankruptcy is avoided (indirect costs):



The payout diagrams for bondholders...

Financial distress in companies can lead to problems that can reduce the efficiency of management. As maximizing firm value and maximizing shareholder value cease to be equivalent managers who are responsible to shareholders might try to transfer value from creditors to shareholders.



...and shareholders in case of liquidation show the reason for a conflict of interests.

The result is a conflict of interest between bondholders (creditors) and shareholders. As a firm's liquidation value slips below its debt, it is the shareholder's interest for the company to invest in risky projects which increase the probability of the firm's value to rise over debt. Risky projects are not in the interest of creditors, since they also increase the probability of the firm’s value to decrease further, leaving them with even less. Since these projects do not necessarily have a positive net present value, costs may arise from lost profits.

Equally, management might choose to prolong bankruptcy, which has the same effect on probabilities of a change in the firm's value. Management might also distribute high dividends to "save" money from the creditors.

Another source of indirect costs of financial distress is higher costs of capital: Short-term loans by contractors and banks are expensive and difficult to obtain.

Valuation

Companies in financial distress undergo corporate restructuring where valuations are used as negotiating tools. This distinction between negotiation and process is a difference between financial restructuring and corporate finance.

Additional modifications to a valuation approach, whether it is market-, income- or asset-based, may be necessary in some instances. There are other adjustments to the financial statements that have to be made when valuing a distressed company.[1]

Options for Relieving Financial Distress

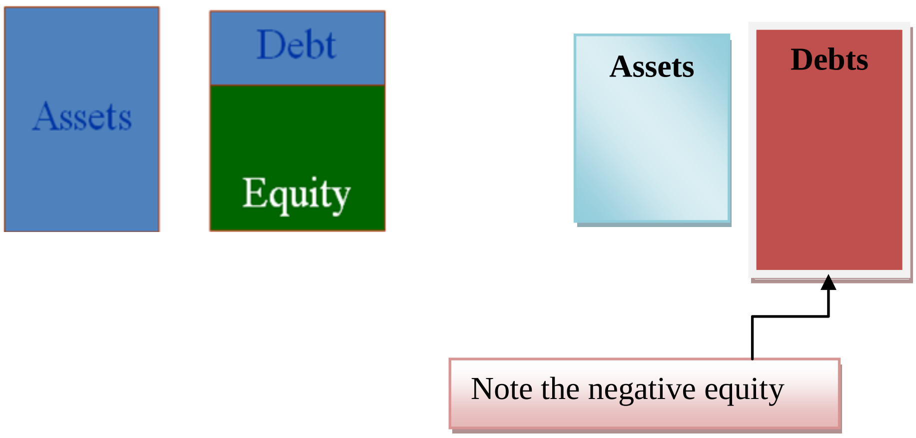
Debt restructuring is a process that allows a private or public company or a sovereign entity facing cash flow problems and financial distress, to reduce and renegotiate its delinquent debts in order to improve or restore liquidity and rehabilitate so that it can continue its operations.

If promises to creditors cannot be kept, bankruptcy is an option for both companies and individuals. In the United Kingdom, the Individual Voluntary Arrangement is a formal alternative to bankruptcy for individuals.

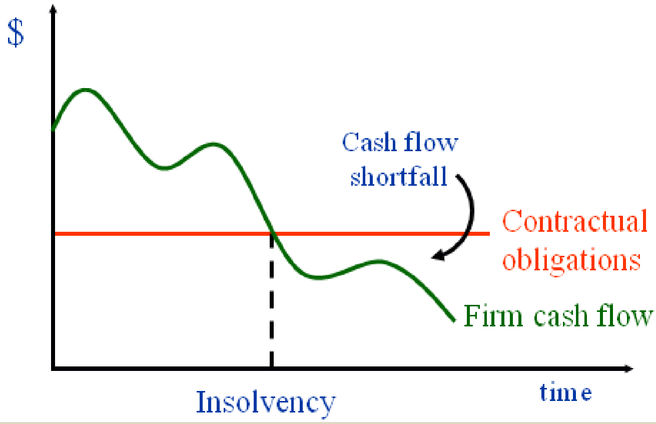
Insolvency

- Stock-base insolvency; the value of the firm’s assets is less than the value of the debt.

Solvent firm **Insolvent Firm**



- Flow-base insolvency occurs when the firm's cash flows are insufficient to cover contractually required payments.



Largest U.S. Bankruptcies

Firm	Liabilities (in $ millions)	Date
Conseco Inc.	$56,639.30	December 2002
Worldcom Inc.	45,984.00	July 2002
Enron Corp.	31,237.00	December 2001
Pacific Gas & Electric Co.	25,717.00	April 2001
UAL Corporation	22,164.00	December 2001

What Happens in Financial Distress?

- Financial distress does not usually result in the firm's death.
- Firms deal with distress by
  - Selling major assets.
  - Merging with another firm.
  - Reducing capital spending and research and development.
  - Issuing new securities.
  - Negotiating with banks and other creditors.
  - Exchanging debt for equity.
  - Filing for bankruptcy.

Predicting Corporate Bankruptcy: The Z-Score Model

Many potential lenders use credit scoring models to assess the creditworthiness of prospective borrowers. The general idea is to find factors that enable the lenders to discriminate between good and bad credit risks. To put it more precisely, lenders want to identify attributes of the borrower that can be used to predict default or bankruptcy.

Edward Altman has developed a model using financial statement ratios and multiple discriminant analyses to predict bankruptcy for public trade manufacturing firms.

The original Z-score model for publicly traded companies is:

$$z = 1.2X_1 + 1.4X_2 + 3.3X_3 + 0.6X_4 + X_5$$

Where:

X1 = working capital/total Assets
X2 = retained earnings/total Assets
X3 = earnings before interests and taxes/total Assets
X4 = market value of equity/book value of total liabilities
X5 = sales/total Assets
Z = overall index

X1(Working Capital/Total Assets)

The working capital/total assets ratio is a measure of the net liquid assets of the firm relative to the total capitalization. Working capital is defined as the difference between current assets and current liabilities. Ordinarily a firm experiencing consistent operating losses will have shrinking current assets in relation to total assets.

X2(Retained Earnings/Total Assets)

Retained earnings are the account which reports the total amount of reinvested earnings and/or losses of a firm over its entire life. The account is also referred to as earned surplus. The RE/TA ratio measures the leverage of a firm. Those firms with high RE, relative to TA, have financed their assets through retention of profits and have not utilized as much debt.

X3(Earnings before Interest and Taxes/Total Assets)

This ratio is a measure of the true productivity of the firm's assets, independent of any tax or leverage factors. Since a firm's ultimate existence is based on the earning power of its assets, this ratio appears to be particularly appropriate for studies dealing with corporate failure.

X4(Market Value of Equity/Book Value of Liabilities)

Equity is measured by the combined value of all shares of stock, preferred and common, while liabilities include both current and long term. The measure shows how much the firm's assets can decline in value before the liabilities exceed the assets and the firm becomes insolvent.

X5(Sales/Total Assets)

The capital-turnover ratio is a standard financial ratio illustrating the sales generating ability of the firm's assets. It is one measure of management's capacity in dealing with competitive conditions. OR

$X1$ = net working capital/total assets
$X2$ = retained earnings/total assets
$X3$ = EBIT/total assets
$X4$ = market value of all equity/book value of total liabilities
$X5$ = sales/total assets

Altman reports that this model is between 80.90% accurate if we use a cutoff point of 2.675. That is, a firm with a Z-score below 2.675 can reasonably be expected to experience severe financial distress, and possibly bankruptcy, within the next year.

The predictive ability of the model is even better if we use a cutoff point of 1.81. There are, therefore, three ranges of Z-scores:

Z < 1.81…………	**Bankruptcy predicted within one year**
1.81 < Z < 2.675……..	**Financial distress, possible bankruptcy**
Z > 2.675………	**No financial distress predicted**

The Z-Score Model for Private Firms

Because variable $X4$ in equation requires knowledge of the firm's market capitalization (including both common and preferred equity), we cannot easily use the model for privately held firms. Estimates of the market value of these firms can be made, but the result is necessarily very uncertain. Alternatively, we could substitute the book value of equity for its market value, but that wouldn't be correct. Most publicly traded firms trade for several times their book value, so such a substitution would seem to call for a new coefficient for $X4$. In fact, all of the coefficients in the model changed when Altman reestimated it for privately held firms.

The new model for privately held firms is:

$$Z' = 0.717X1 + 0.847X2 + 3.107X3 + 0.420X4 + 0.998X5$$

where all of the variables are defined as before, except that $X4$ uses the book value of equity. Altman reports that this model is only slightly less accurate than the one for publicly traded firms when we use the new cutoff points shown below

$Z' < 1.21$	Bankruptcy predicted within one year
$1.23 < Z' < 2.90$	Financial distress, possible bankruptcy
$Z' > 2.90$	No financial distress predicted

Financial Statement Ratios One Year before Bankruptcy: Manufacturing Firms

	Average Ratios One Year before Bankruptcy of	
	Bankrupt Firms	**Nonbankrupt Firms**
$\frac{\text{Net working capital}}{\text{Total assets}}$	−6.1%	41.4%
$\frac{\text{Accumulated retained earnings}}{\text{Total assets}}$	−62.6%	35.5%
$\frac{\text{EBIT}}{\text{Total assets}}$	−31.8%	15.4%
$\frac{\text{Market value of equity}}{\text{Total liabilities}}$	40.1%	247.7%
$\frac{\text{Sales}}{\text{Assets}}$	150%	190%

SOURCE: Edward I. Altman, *Corporate Financial Distress and Bankruptcy* (New York: John Wiley & Sons, 1993), Table 3.1, p. 109.

Z-score analysis for WorldCom, 2004
(Accounting data prior to restatements)

Ratio	Definition	1999	2000	2001
X_1	Working capital/total assets	(0.08)	(0.08)	0.00
X_2	Retained earnings/total assets	(0.01)	0.03	0.04
X_3	Earnings before interest and taxes/total assets	0.08	0.08	0.02
X_4	Market value of equity/book value of total liabilities	3.58	1.13	0.54
X_5	Sales/total assets	0.39	0.40	0.31
Z	**Z-score**	**2.697**	**1.274**	**0.798**

End of Chapter 03

Chapter 04: Financial Reporting Template (FRT) for Small and Medium Sized Enterprises (SMEs)

Phnom Penh, 16 June 2006

PRAKAS
ON
INTRODUCTION OF FINANCIAL REPORTING TEMPLATE
FOR SMALL AND MEDIUM-SIZED ENTERPRISES

****

Senior Minister
Minister of Economy and Finance

- Having seen the Constitution of the Kingdom of Cambodia;
- Having seen Royal Decree No NS/RKT/0704/001 dated 13 July 2004 promulgating addendum to the Constitution aimed to secure regular functioning of the national institutions;
- Having seen Royal Decree No NS/RKT/0704/124 dated 15 July 2004 on appointment of the Royal Government of Cambodia;
- Having seen Royal Kram No 02 NS/94 dated 20 July 1994 promulgating Law on Organising and Functioning of the Council of Ministers;
- Having seen Royal Kram No NS/RKM/0196/18 dated 24 January 1996 promulgating Law on Establishment of the Ministry of Economy and Finance;
- Having seen sub-decree No 04/ANKr/BK dated 20 January 2000 on the Composition and Functioning of the Ministry of Economy and Finance;
- Having seen sub-decree No 87/ANKr/BK dated 18 January 2004 on the addition and rectification of a number of departments of the Ministry of Economy and Finance;
- Having seen Royal Kram ChS/RKM/069/03 dated 17 June 1996 promulgating Law on General Statute of Public Enterprises;
- Having seen Royal Kram NS/RKM/0702/011 dated 8 July 2002 promulgating Law on Corporate Accounts, Their Audit and Accounting Profession;
- Having seen Sub-Decree No 08 ANKr BK dated 3 March 2003 on Composition and Functioning of National Accounting Council;
- Having seen Prakas of the Ministry of Economy and Finance No. 170 SHV dated 27 March 2003 on Appointment of Board of Director to the National Accounting Council;
- As requested by the National Accounting Council according to minute of meeting dated 27 March 2006;
- Pursuant to the necessity of the Ministry of Economy and Finance.

DECIDES
Article 1

To introduce to small and medium-sized enterprise defined in article 2 below a standard financial reporting template called "**Financial Reporting Template for**

Small and Medium-Sized Enterprises" as attached in Appendix of this Prakas to use so as to facilitate each small and medium-sized enterprise with a tool to apply for financing from banking and financial institutions, or for other needs at all time before being able to prepare financial statements by due date and in accordance with laws and regulations in force.

Article 2

It is deemed as "**SMEs**" automatically under this Prakas any enterprise carrying on business activities, which is not subject to obligation of preparing financial statements in accordance with Cambodian Accounting Standards, and based on its declaration data or examination, meets two of the three following criteria:

1. Total maximum workers-employees from 11 to 100.
2. Annual turnover is from 100 million Riels to less than 250 million Riels.
3. Total assets are from 100 million Riels to 250 million Riels.

Article 3

In preparing financial statements in accordance with the template as stated in Article 1 above, each small and medium-sized enterprise shall be responsible for its declaration by ensuring that all data provided are obtained from records or statistics properly maintained in accordance with relevant applicable laws and regulations.

Article 4

National Accounting Council shall be in charge of public dissemination, especially among SME milieu as well as banking and financial institutions, of the spirit of this Prakas and the Financial Reporting Template as in Appendix, and follows through to enforce the implementation until objectives are achieved.

Article 5

National Accounting Council, General Secretariat, General Inspection, all relevant departments and units under the tutelage of the Ministry of Economy and Finance, and all SMEs in the kingdom of Cambodia shall rigorously implement this Prakas in accordance with individual duties.

Article 6

This Prakas is effective from the date of signature.

Senior Minister
Minister of Economy and Finance

Recipients

- As in Article 5 "for implementation"
- Archives-documentation

cc

- Council of Ministers "for information"
- Administration Office of the Council of Ministers "for publication in Royal Gazette"

- **Forward**
- The Royal Government of Cambodia has passed many laws in recent years to facilitate Cambodia's modernization and integration into the global economy. In 2002, the requirement to prepare financial statements was mandated in the Law on Corporate Accounts, their Audit, and the Accounting Profession ("LAAAP"), and in 2003, Cambodian Accounting Standards ("CAS") were introduced. The purpose of CAS is to provide the basis for recording and classifying financial transactions, and to establish a framework for preparing financial statements.
- In 2005, the National Accounting Council ("NAC"), in conjunction with the Asian Development Bank ("ADB") and the Kampuchea Institute of Certified Public Accountants and Auditors ("KICPAA"), undertook a review of the implementation of the LAAAP. Consequently, a new Prakas was issued, which, inter alia, established thresholds for enterprises to be subject to statutory audit. In addition to establishing the statutory audit thresholds, the Prakas clarified that only those enterprises that were subject to statutory audit were required to prepare financial statements in accordance with CAS.
- The Cambodian economy, at its current stage of economic development, is host to a large number of small and medium sized enterprises ("SMEs") that are not required to prepare financial statements in accordance with CAS. However, these same SMEs often find it difficult to obtain access to finance, due to their inability to provide lending institutions with appropriate financial information.
- To assist SMEs to improve their access to finance, NAC and KICPAA, together with Asian Development Bank (ADB), designed the attached financial reporting template as part of ADB's SME Development Program technical assistance. In addition to the template, this booklet contains explanatory notes on the basis of preparation of the financial reporting template, a definitions section that explains in plain language the various items that make up the financial statements and the terms contained therein, and a brief narrative on why it is important for enterprises to maintain accounting records, and produce financial statements.
- I fully encourage SMEs to use the template in this booklet as a basis for preparing financial statements, for both internal management purposes, and for presentation to banks to support an application for a loan.
-
- Phnom Penh , June 14, 2006
-
-
-
- **H.E. Ngy Tayi**
- Under Secretary of State of Ministry of Economy and Finance
- Chairman of the Cambodian Accounting System Reform and
- National Accounting Council

Overview of Financial Reporting Template for SMEs

Overview

The Financial Reporting Template ("FRT") has been designed to assist enterprises to prepare a basic set of financial statements. The main reason for developing the FRT is to enable enterprises to provide basic financial information to potential lenders. In addition it is anticipated that by preparing basic financial statements, owners and managers of enterprises will be able to better understand and manage their business.

The FRT is a tool to assist enterprises in preparing their financial statements to accompany an application for borrowing from lenders, and to assist enterprises to comply with the applicable laws and regulations.

What is the FRT?

The FRT includes the following components:

1. Corporate information / enterprise information
2. Statement by Directors / Statement by Owner
3. Balance Sheet
4. Income Statement
5. Notes to the financial statements

An explanation of each component of the FRT follows:

1. Corporate information / enterprise information

This schedule provides the readers of the financial statements with fundamental information about the enterprise.

The registration number indicates the legal form of the enterprise, and should be obtained from the business registration or license certificate issued by the relevant authority.

The registered office is the address of the primary place of business, and should be the same as that registered with the relevant regulatory authority. This address should also be the primary address for communication purposes.

The disclosure of shareholder/owner, directors and management team information provides the readers of the financial statements with important detail about the ownership and management structure of the enterprise. If the directors and management team are different to the shareholders / owners this would indicate that the owners may not be involved in the day to day running of the business.

The disclosure of the principal banker is useful, particularly if the enterprise is seeking credit.

2. Statement by the directors / statement by the owner

Signature of this statement by the directors / owners provides a degree of comfort to users of the financial statements. By signing this statement, the directors / owners acknowledge that the financial statements have been prepared using the accounting policies attached to the notes to the accounts, and implies that users of the financial statements can rely upon the application of those policies in preparing the statements.

Signature ostensibly gives directors / owners ownership of the financial statements.

3. Balance Sheet

The Balance Sheet provides the financial position of the enterprise as at a particular date. In Cambodia, an annual balance sheet is normally prepared as at 31 December of each year.

4. Income statement

The income statement shows the results of the business operations of the enterprise for the accounting period. In Cambodia, the normal accounting period is the year ended 31 December.

5. Notes to the financial statements

The notes to the financial statements comprise:

1. Organization and principal activities
2. Significant accounting policies
3. Assumptions underlying the financial statements
4. Additional information

The "organization and principal activities" is an important disclosure as this allows the user of the financial statement to understand the legal form of the enterprise, its areas of business activity, and size (in terms of employees).

The significant accounting policies allow the reader to understand the accounting policies adopted in preparing the financial statements.

The underlying assumptions disclosure provides further information on the financial statements as to the manner in which the financial statements have been prepared.

The additional information notes provide detailed information for each item that appears on the face of the Balance Sheet and Income Statement.

Benefits of using FRT

The FRT was developed to assist SMEs to produce basic financial statements. The objectives of enabling SMEs to produce basic financial statements are to allow the managers and owners of SMEs to better manage their businesses, and to improve their access to finance by providing basic financial information to potential lenders, primarily commercial banks.

The preparation of financial statements will assist SMEs in the following ways:

1. Better manage the business

The preparation of financial statements will provide important financial information to owners and managers of enterprises to assist in better managing the enterprise. The Income Statement will provide a measure of the operational performance of the enterprise, and the Balance Sheet will provide a snapshot of the health of the business at a particular point in time.

Income Statement - Measure of operational performance

The Income Statement quantifies in monetary terms the results of business operations in any period. By preparing the income statement SMEs will be able to establish whether the business is either making a profit or a loss. By critically reviewing the financial statement, owners and managers will be able to make informed decisions on the operational performance of the business, and the analysis of the income statement will assist in determining actions to be taken to improve business performance.

In particular, owners and managers will be able to monitor revenue streams and expenditure of the business. Operational performance may basically be considered as good if the enterprise makes a profit. Conversely, performance may be considered unsatisfactory if the enterprise makes a loss.

The following are examples of remedial action that an enterprise may take, as a result of the review of the income statement:

Income: If sales during the period decrease there may be a number of different reasons why this happens. One reason may be due to poor customer service. If this is the case, the management may consider providing relevant training and / or incentives to staff who improve the sales of the enterprise.

Expenses: The management may plan to reduce costs in order to maximise profit. One method of reducing costs would be to negotiate better prices and terms with suppliers of goods and services. Discounts will reduce cost of sales and result in increase of enterprise profitability.

On the other hand, the management may review expense items that are costly and find out if it is possible to reduce cost by using substitute products.

Balance Sheet - Financial position

The Balance Sheet provides a snapshot of the financial position of an enterprise at a point in time. An enterprise is generally considered to be in a good financial position if the enterprise has an excess of assets over liabilities, and if there are accumulated profits. Conversely, an enterprise would be considered to be in a poor financial position if liabilities exceed assets, and the enterprise has accumulated losses.

The Balance Sheet will also show the ability of the enterprise to meet future obligations, and will show the assets available to fund future expansion.

By reviewing the balance sheet an owner or manager will be able to make informed decisions about the health of the business.

Liquidity

To survive and prosper a business must be able to meet its financial obligations as and when they fall due. In simple language, this means that a business is able to pay its expenses within the timeframe provided by suppliers. An enterprise is generally considered liquid if its current assets exceed its current liabilities. By preparing a balance sheet an owner or manager will be able to determine the enterprises liquidity.

If the company is extremely liquid, that is, if current assets far exceed current liabilities, then the enterprise may be in a position to expand its business. However, if current liabilities exceed current assets this could indicate that the enterprise may be facing financial difficulties.

2. Better access to finance

For an enterprise to be able to obtain a loan from a bank the enterprise must be able to show the bank that it has a good business, and that it will be able to repay the money borrowed from the bank. The best way to demonstrate to the bank the health of the business is to provide a set of financial statements, including the Income Statement and the Balance Sheet.

In the same way that the Income Statement and Balance Sheet will provide the owner and manager of an enterprise with information to make informed business decisions, the bank will be able to make similar decisions about the enterprise's ability to repay a bank loan.

If an enterprise provides a bank with a financial statement, this will make it easier for the bank to evaluate the credit worthiness of the enterprise, and should reduce the amount of time that a bank takes to decide whether a loan can be made.

In addition, a proven track record in business, as demonstrated by financial statements covering a number of years, could result in an enterprise obtaining lower interest rates.

3. Cost savings

By preparing their own financial statements owners and managers may not need to engage third parties to prepare financial statements, which would result in cost savings to the enterprise.

Definitions

Introduction

The definitions contained in this document explain the terms included in the Financial Reporting Template ("FRT"). The definitions have been based on the definitions of accounting terms contained in Cambodian Accounting Standard (CAS), however have been simplified in an attempt to allow a broader audience, other than qualified accountants, to understand the content of the Financial Reporting Template.

Definitions

Balance Sheet

The Balance Sheet is a statement that lists all the assets owned by a business, all the liabilities owed by a business, the share capital of, or the owner's capital contribution to the business, and the earnings retained in the business, as at a particular date. The balance sheet can be described by the following simple equation:

Total Assets = Total Liabilities + Share Capital / Owners Capital Contribution + Retained Earnings

Or

Total Assets – Total Liabilities = Share Capital / Owners Capital Contribution + Retained Earnings

Asset

An asset is an item of value owned by the business.

Liability

A liability is an amount owed by the business to someone else.

Equity

Equity is the difference between the assets owned by an enterprise, and the liabilities owed by an enterprise. Equity normally comprises "Share Capital / Owners Capital Contribution" and "Retained Earnings".

Related parties

Parties are considered to be related if one party has the ability to control the other party, or exercise significant influence over the other party, in making financial and operating decisions.

Significant influence is participation in the financial and operating policy decisions of an enterprise, but not necessarily controlling those policies.

External parties

Parties are considered to be external if there is no ability for one party to exert control over the other party.

Non-current assets

Assets are classified as "Non-current" if they have an expected useful life of greater than one year, or are not expected to be realized in less than one year. Non-current assets can be sub-classified as follows:

Fixed assets

Fixed assets are assets that are:

- used by an enterprise to produce or supply goods or services,
- used for administrative purposes, or
- rented to others for profit

Fixed assets include buildings, motor vehicles, machines, furniture, and office equipment.

Due from related parties

These are amounts owed to the enterprise by related parties, expected to be repaid after more than one year.

Due from external parties

These are amounts owed to the enterprise by non-related parties, expected to be repaid after more than one year.

Other non-current assets

All other assets not considered fixed assets, due from related parties, or due from external parties, that are not expected to be realized within one year, are classified as "other non-current assets".

Current assets

An asset should be classified as a current asset when:

(a) it is expected to be realised in, or is held for sale or consumption, in the normal course of the enterprise's operating cycle; or

(b) it is held primarily for trading purposes or for the short-term and expected to be realised within twelve months of the balance sheet date; or
(c) it is cash or cash equivalent asset (such as bank account) which is not restricted in its use.

Current assets are assets that are expected to be used / or replaced within twelve months of the balance date.

Trade and other receivables

Basically, trade and other receivables are amounts owed to the business by its customers. A receivable arises when goods or services have been sold to a customer, and payment has not been received.

Provision for bad and doubtful debt

A bad debt is a debt that cannot be recovered from a customer. A doubtful debt is a debt that is unlikely to be recovered from a customer.

A provision for bad and doubtful debts should be made at balance date to estimate the amount of debts that will not be collected from customers.

The provision will be deducted from the profit in the Income Statement and will also be deducted from the "Trade and other receivables" figure in the Balance Sheet.

Inventories

Inventories are normally:

- current assets held for sale in the ordinary course of business, or
- current assets used in the production of goods held for resale.

Basically, inventory is the value of stock or goods which exists at the end of the accounting period, and is calculated as follows:

Ending inventory = opening inventory + purchases + goods manufactured – less sales

Due from related parties

These are amounts owed to the enterprise by related parties, expected to be repaid in less than one year.

Due from external parties

These are amounts owed to the enterprise by other parties, who are not customers and related parties, expected to be repaid in less than one year.

Cash and bank balances

Amount of cash held by an enterprise, together with the amount in the enterprise's bank account(s) at balance sheet date.

Total assets

Total assets are an aggregate amount of total non-current assets and total current assets.

Non-current liabilities

Basically, non-current liabilities are amounts owed to someone else, such as banks and money-lenders, which are payable after twelve months.

Due to related parties

These are amounts owed by the enterprise to related parties, expected to be repaid after more than one year.

Due to external parties

These are amounts owed by the enterprise to non-related parties, expected to be repaid after more than one year.

Current liabilities

A liability should be classified as a current liability when it:

(a) is expected to be settled in the normal course of the enterprise's operating cycle; or
(b) is due to be settled within twelve months of the balance sheet date.

Basically, current liabilities are what a company currently owes to its suppliers and creditors.

Bank overdraft

A bank overdraft is a bank account where the bank allows the enterprise to "borrow" cash on a short-term basis to meet the needs of the enterprise. The overdraft facility is normally formalized, and subject to the enterprise providing security to secure the amount of the overdraft.

Trade and other payables

Basically, trade and other payables are amounts owed (within twelve months) by an enterprise for goods and services purchased on credit terms. This means payment for goods and services is due at a date later than the date of purchase.

Due to related parties

These are amounts owed by the enterprise to related parties, expected to be repaid in less than one year. These amounts are often advances from shareholders / owners.

Due to external parties

These are amounts owed by the enterprise to other parties, who are not customers and related parties, expected to be repaid in less than one year.

Total liabilities

Total liabilities is the aggregate of total non-current liabilities and current liabilities.

Equity

Equity is the difference between the assets owned by an enterprise, and the liabilities owed by an enterprise. Equity normally comprises "Share Capital / Owners Capital Contribution" and "Retained Earnings".

Paid up share capital

This represents the money that shareholders invest in the business, and cannot be withdrawn from the business until the business ceases operations.

Owner's capital contribution

This is similar to Paid Up Capital, and refers to the amount of money a sole proprietor, or owner, puts into the enterprise. The owner's capital contribution will increase if the owner puts in additional funds, or decrease if the owner withdraws funds, over the life of the business.

Drawings

Drawings represent cash taken out of the business by the owner of the enterprise.

Retained earnings – prior period

"Retained earnings – prior period" are profits earned by the enterprise in periods prior to the current financial year, and not paid out to the owners of the enterprise. If losses were made in prior periods this figure will be negative.

In the first year of enterprise operation, there will be no prior year retained earnings.

Retained earnings - prior period equals the accumulation of profits and losses from the commencement of business until the end of the year prior to the current year.

Retained earnings – current period

These are current year profits not paid out to the owners of the enterprise. This amount should be equal to the "profit/(loss) for the year" in the Income Statement.

Total equity

Total equity is the aggregate amount of Share Capital / Owner Capital contribution, retained earnings for prior periods and retained earnings for current period, less "drawings".

Total liabilities and equity

The aggregate amount of total liabilities and total equity, and must be equal to total assets.

Income statement

The Income Statement calculates the net profit or loss that the business has made within an accounting period, by deducting all expenditure from the income. A net profit is earned if total revenue exceeds total expenditure; a net loss is made if total expenditure exceeds total revenue.

Revenue

Revenue represents gross income after deducting discount earned by an enterprise from carrying on its normal business activities, and usually is calculated as the value of goods and services sold to customers during the year.

Cost of sales and services

Cost of sales is the cost price of goods and services sold to customers, and is calculated as follows:

- Opening stock, (the cost of stock that exists at the beginning of the year)
- Plus Purchases of goods for resale, during the year
- Plus Production cost of goods manufactured, during the year.
- Less Closing stock, (the cost of stock that exists at the end of the year). Closing stock is equal to "inventory" that appears in the Balance Sheet as inventory in the current assets section.

Gross profit

Gross profit is the difference between revenue and cost of sales and services, and is calculated as follows:

Gross Profit = Revenue – Cost of sales and services

Gross profit is often shown as a percentage, and assists in evaluating the profitability of an enterprise. Normally, the higher the Gross Profit in percentage terms, the more profitable the enterprise.

Other operating income

Other operating income represents income that is not related to the main business activity. Examples of other operating income will be rent (if the main business is not that of a landlord), dividends, profit of sale of fixed assets, insurance claims etc. Other operating income does not include interest income (which is shown separately).

Operating expenses

Operating expenses are costs associated with running a business, but not directly related to the cost of goods and services being sold.

Profit / (loss) from operations

The excess or deficit of total operating income over operating expenditure. The profit or loss is calculated as follows:

Profit / loss = Gross profit / (loss) + other operating income – operating expenses

Profit / (loss) from operations is also called profit / (loss) before interest and tax.

Interest (expense) / income

Interest expense

This is interest charged on borrowings during the year.

Interest income

This is interest earned from:

- money deposited with a bank,

- money lent to related or external parties,
- customers for their late payment under credit terms.

Profit / (loss) before income tax
This is calculated by (deducting) / adding net interest (expense) / income from profit / (loss) from operations.

Income tax expense
Income tax expense represents the amount of profit tax paid to the Tax Department during the year.

Profit / (loss) for the year
Profit / (loss) for the year is the net result of all business activities carried out during the year, and is calculated by deducting income tax expense from profit / (loss) before income tax.

Notes to the financial statements

Accruals basis of accounting
Under this basis, transactions are recognized when they occur regardless of whether cash has been paid or received. Transactions are recorded in the accounting period to which they relate.

Historical cost basis
The historical cost basis of accounting records transactions at the actual cost at the date of the transaction. The costs of each transaction are not adjusted for changes in current costs at a particular valuation date.

Depreciation of fixed assets
Depreciation
Depreciation is the "cost" of writing off fixed assets over their anticipated useful life. In other words, depreciation is the measure of "wearing out" of a fixed asset.
Straight line depreciation

Straight line depreciation writes off the cost of a fixed asset in equal amounts over its useful life. For example, if an asset has a useful life of 5 years, the cost of the asset would be written off in equal amounts over 5 years.

Accumulated Depreciation
Accumulated depreciation is the total depreciation charged from year of buying an asset to the end of the current accounting year.

Net book value
Net book value is the depreciated value of a fixed asset at the end of the year, and is calculated as follows:

Net Book Value = Value of fixed asset at start – accumulated depreciation
The net book value of fixed assets is shown in the balance sheet.

Instructions on Completing FRT for SMEs

The FRT is available in electronic and manual formats. Following are instructions for transferring your financial information into the FRT.

Completing the template using the spreadsheet version

1. Firstly, you will need to make a list, or trial balance, of all income, expenditure, assets, liabilities and capital of the business.
2. From your list, or trial balance, transfer the information to the appropriate classifications in notes 4 to 16 to financial statements. The majority of the detail in the Balance Sheet and Income Statement will be updated automatically once the information has been inserted into the notes to the financial statements.
3. “Other operating income” and “income tax expense” will need to be input **directly** into the Income Statement from your source of information.
4. Information for “Cash and bank balances”, and “Bank overdraft” will need to be input **directly** into the Balance Sheet from your information.
5. Insert "Retained earnings – prior periods". This will be taken from the previous year financial statement. Leave this item blank if this is the first year of completing the template.
6. If your information is correctly input, "total assets" will equal "total liabilities and equity", and “Retained Earnings – Current Period” will be equal to “Profit /(loss) for the year” from the Income Statement.

Completing the manual template

1. Firstly, you will need to make a list, or trial balance, of all income, expenditure, assets, liabilities and capital of the business.
2. From your list, or trial balance, transfer the information to the appropriate classifications in notes 4 to 16 to financial statements.
3. Transfer totals from each component in notes 4 to 16 to the financial statements to the corresponding classifications in the Balance Sheet and Income Statement. For example:
   Note 4: Fixed assets
   Transfer "net book value as at 31 December $20XX_1$" in total fixed assets column to "fixed assets in column $20XX_1$" in Balance Sheet.
   Note 15: Operating expenses
   Transfer total figure in column $20XX_1$ to "operating expenses" in column $20XX_1$ in Income Statement.
4. “Other operating income” and “income tax expense” will need to be input **directly** into the Income Statement from your source of information.
5. Calculate “Profit / (loss) for the year”.
6. Information for “Cash and bank balances” and “Bank overdraft” will need to be input **directly** into the Balance Sheet from your information.
7. Insert "Retained earnings – prior periods". This will be taken from the previous year financial statement. Leave this item blank if this is the first year of completing the template.
8. Insert “Retained Earnings – Current Period”. The amount should be equal to “Profit / (loss) for the year” from the Income Statement.
9. If your information is correctly input, "total assets" will equal "total liabilities and equity".

FRT for company

ABC CO LTD.
Financial Statements
and
Directors' Statement
31 December $20XX_1$

Corporate information

Company	ABC Co. Ltd
Registration No.	XXXXXXXXXXX
Issued by	XXXXXXXXXXX
Registered office	XXXXXXXXXXX XXXXXXXXXXX XXXXXXXXXXX Cambodia
Shareholder	XXXXXXXXXXX
Directors	XXXXXXXXXXX XXXXXXXXXXX XXXXXXXXXXX
Management team	XXXXXXXXXXX XXXXXXXXXXX
Principal bankers	XXXXXXXXXXX

Statement by the directors

We, XXXXXXXXXXXXX and XXXXXXXXXXXX, on behalf of the Board of Directors do hereby state that the financial statements of ABC Co. Ltd ("the Company") set out on pages … to … have been prepared in accordance with the accounting policies set out in Notes 2 and 3 to the financial statements.

[Signed on behalf of the Board in accordance with a resolution of the directors,]

____
XXXXXXXXXXXXX
Director

____
XXXXXXXXXXXXX
Director
Date:

ABC Co. Ltd
Balance sheet
31 December $20XX_1$

	Note	$20XX_1$ R'000	$20XX_0$ R'000
Non-current assets			
Fixed assets	4	-	-
Due from related parties	5(a)	-	-
Due from external parties	6(a)	-	-
Other non-current assets		-	-
Total non-current assets		-	-
Current assets			
Trade and other receivables	8	-	-
Inventories	7	-	-
Due from related parties	5(b)	-	-
Due from external parties	6(b)	-	-
Cash and bank balances		-	-
Total current assets		-	-
Total assets		-	-
Non-current liabilities			
Due to related parties	10(a)	-	-
Due to external parties	11(a)	-	-
Total non-current liabilities		-	-
Current liabilities			
Bank overdraft		-	-
Trade and other payables	9	-	-
Due to related parties	10(b)	-	-
Due to external parties	11(b)	-	-
Total current liabilities		-	-
Total liabilities		-	-
Equity			
Paid up share capital	12	-	-
Retained earnings – prior period		-	-
Retained earnings – current period		-	-
Total equity		-	-
Total liabilities and equity		-	-

These accounts are unaudited. The accompanying notes form part of these financial statements.

ABC Co. Ltd
Income statement
Year ended 31 December $20XX_1$

	Note	$20XX_1$	$20XX_0$
		R'000	R'000
Revenue	13	-	-
Cost of sales and services	14	( )	( )
Gross profit		-	-
Other operating income		-	-
		-	-
Operating expenses	15	( )	( )
Profit / (loss) from operations		-	-
Interest (expense) / income	16	( )	( )
Profit / (loss) before income tax		-	-
Income tax expense		( )	( )
Profit / (loss) for the year		-	-

These accounts are unaudited. The accompanying notes form part of these financial statements.

ABC Co. Ltd
Notes to the financial statements
31 December 20XX$_1$

1. Organization and principal activities

The Company was incorporated in Cambodia on __________ under Registration No. _______ and commenced operations on _______.

The principal activities of the Company are
____

As of 31 December 20XX$_1$the Company had ___ employees (20XX$_0$:___).

2. Significant accounting policies

Basis of preparation

The financial statements have been prepared under the accruals basis of accounting, using the historical cost basis.

(a) Currency and foreign exchange

Sale and purchase transactions in foreign currencies are recorded in the Riel equivalent at the date of the transaction. Foreign exchange gains or losses resulting from the settlement of such transactions are recognised in the income statement. Assets and liabilities denominated in foreign currency at the balance sheet date are retained in the balance sheet at historical exchange rates.

(b) Fixed assets

a. Fixed assets are stated at cost less accumulated depreciation.

b. Depreciation

   i. Freehold land is not depreciated

   ii. Depreciation on fixed assets is charged as expense on a straight-line basis using the following annual rates:

Buildings	xx%
Computers, computer software and related equipment	xx%
Motor vehicles	xx%
Office furniture and office equipment	xx%
Other fixed assets	xx%

(c) Inventories

Inventories are valued at the lower of cost and net realisable value, and measured on an average cost basis.

(d) Receivables

Receivables are valued at gross book value less provision for doubtful debts.

(e) Non-current loans

Non-current loans are valued at book value, less repayments of principal and provision for non-recovery.

(f) Leases

Lease payments are recognised as expense in the period in which they are incurred.

(g) Borrowing costs

Borrowing costs are recognised as an expense in the period in which they are incurred.

(h) Taxation

Taxation expense is calculated based on the current company tax rate on profits, adjusted for disallowable expenses or exempt forms of income, and taking into account any tax losses available in accordance with the Law on Taxation. Deferred tax is not recognized.

i) **Revenue recognition**

Revenue is recognised when it is probable that the economic benefits associated with the transaction will flow to the Company and the amount of the revenue can be measured reliably. Revenue is stated net of discounts and allowances.

3. Assumptions underlying the financial statements

The financial statements have been prepared on a going-concern basis, and the accounting policies have been consistently applied. Comparative information has been provided, and immaterial amounts have not been disclosed. Offsetting of assets and liabilities has not taken place.

End of Chapter 04

Financial Reporting Template for Small and Medium Sized Enterprises. **Minitry of Economy and Finance, Cambodia. 2006.** Phnom Penh, Cambodia : s.n., 2006.