KAMPALA INTERNATIONAL UNIVERSITY UGANDA

COURSE MODULE – ADVANCED ACCOUNTING

Faculty : **MBA**

Semester : **2:1**

Academic Year : **2020-2021**

College : **College of Economics and Management**
Department : **Accounting and Finance**
Subject Code & Title : **MBAFA 7303 Advanced Accounting**
Lecturing Hours : **3 Hours Per Week**

Subject Instructor : **Dr. Omweno N. Enock**

Email address : oenock@kiu.ac.ug

Phone : **+254792652044/0774756286**

COURSE PURPOSE:

Advanced accounting allows students to gain advanced knowledge of financial accounting and reporting issues such that they will understand topical areas of business combinations, and group accounting, consolidated financial statements. The course should be studied in a tandem with relevant extant accounting standards (e.g., IFRS, FASB).

EXPECTED LEARNING OUTCOMES

By the end of the course, students should be able to understand and;

Discuss the environmental influences on financial reporting.
Explain the issues involved in consolidation.

Describe the principles involved in preparing consolidated financial statements.

UNIT 1

ORIGIN OF ACCOUNTING STANDARDS/ REGULATIONS

This unit aims to help students understand on the origin of standardization and principles that guide businesses in keeping in line with generally accepted accounting standards in their everyday operations. The unit also aims to guide students understand the effect of goodwill in a business combinations and consolidations.

1.1 Study Objectives

At the completion of the course, students should be able to demonstrate knowledge and understanding. Development and classification of IASs, Practical knowledge on reporting and disclosure, Practical knowledge on foreign currency translation, financial reporting and changing prices, International financial statement analysis and interpretation.

1. Stating the objectives of IASC.

2. State the obligations member countries of IASC are expected to do to support the objectives of IASC.

3. List and discuss the operating structure of IASC.

4. Describe the operating procedures of IASC for setting up accounting standards.

1.2 Introduction

Accounting Standards (ASs) are written policy documents issued by expert accounting body or by government or other regulatory body covering the aspects of recognition, measurement, presentation and disclosure of accounting transactions in the financial statements. The ostensible purpose of the standard setting bodies is to promote the dissemination of timely and useful financial information to investors and certain other parties having an interest in the company's economic performance. Accounting Standards reduce the accounting alternatives in the preparation of financial statements within the bounds of

rationality, thereby ensuring comparability of financial statements of different enterprises. Accounting Standards deal with the issues of (i) recognition of events and transactions in the financial statements, (ii) measurement of these transactions and events, (iii) presentation of these transactions and events in the financial statements in a manner that is meaningful and understandable to the reader, and (iv) the disclosure requirements which should be there to enable the public at large and the stakeholders and the potential investors in particular, to get an insight into what these financial statements are trying to reflect and thereby facilitating them to take prudent and informed business decisions.

Accounting Standards standardize diverse accounting policies with a view to eliminate, to the

maximum possible extent, (i) the non-comparability of financial statements and thereby improving the reliability of financial statements, and (ii) to provide a set of standard accounting policies, valuation norms and disclosure requirements. We shall go into dept to know the history of accounting standards later. But let us see the need for global accounting standards.

1.2.1 BENEFITS OF GLOBAL ACCOUNTING STANDARDS

Among the benefits often cited for a single set of global accounting standards are:

1. Easier access to foreign capital market.

2. Credibility of domestic capital markets to foreign capital providers and potential foreign merger partners.

3. Credibility to potential lenders of financial statements of companies from lesser-developed countries.

4. Lower cost of capital to companies.

5. Comparability of financial data across borders.

6. Greater transparency.

7. Greater understanding-a "common financial language".

8. Companies need to keep only one set of books.

9. Reduced national standard-setting costs.

10. Ease of regulation of securities markets-regulatory acceptability of financial information provided by market participants.

11. Still can have local implementation guidance for local circumstances.

12. Standards are less susceptible to political pressures than national standards.

13. Portability of knowledge and education across national boundaries.

14. Consistent with the concept of a single global professional credential.

1.2.2 EVOLUTION OF ACCOUNTING STANDARDS

Formal standard setting has a longer history in the United States than in any other country.

As early as in 1932-34, the American Institute of Accountants (now known as American Institute of Certified Public Accountants), collaborated with the New York Stock Exchange in the formulation of five 'rules or principles' of accounting to narrow down the variations in accounting policies, recommend disclosures for significant items, and suggest improvement in disclosures required by accounting standards keeping in view the company law and other regulatory requirements. In 1959, the American Institute of Certified Public Accountants (AICPA) established the Accounting Principles Board (APB) with the objective of carrying on research so as to provide a solid conceptual base for its opinions. APB was replaced by Financial Accounting Standards Board (FASB) in 1973. Accounting Standards Committee (ASC) was set up in United Kingdom to lay down 'standards' which could produce greater uniformity in financial accounting practices.

Prior to 1970s, very few academicians paid much attention to the standard setting process in accounting. However, it became clear that standard setting was a fascinating process that had intertwined with the economic self-interests of the affected parties. Currently, standard

setting boards or committees are active in number of countries including the United States, United Kingdom, Australia, Canada, India etc. In the same direction, the International

Accounting Standards Committee (now known as IASB), the London based group responsible for developing International Accounting Standards, was set up in June 1973. The IASC comprises the professional accountancy bodies of over 75 countries (including the Institute of Chartered Accountants of Uganda).

1.2.3 JUSTIFICATION FOR HAVING INTERNATIONAL STANDARD SETTERS

1. There is a recognized and growing need for international standards.

2. No individual standard setter has a monopoly on the best solutions to accounting problems.

3. No national standard setter is in a position to set accounting standards that can gain acceptance around the world.

4. There are many areas of financial reporting in which a national standard setter finds it difficult to act alone.

1.2.3 RECENT TRENDS IN INTERNATIONAL FINANCIAL REPORTING STANDARDS

The standards issued by the IASC in its last few years and the direction that the IASB has taken in its first few years allow the following observations about trends in international financial reporting standards:

1. Greater use of fair value in measuring transactions: financial instruments (trading investments), impairment recognition (write-down to fair values) and prohibition of pooling interests.

2. More fair values on the balance sheet: financial instruments (proposed by IASB in its IAS 39 revisions), investment property, commodity inventories, biological assets and agricultural produce, property acquired in exchange for similar property and venture capital funds.

3. More unrealized components of income: performance reporting becomes key.

4. No income smoothing, cost deferrals or general provisions: remove the corridor approach to pensions, balance sheet approach to deferred taxes, no accruals for future losses and rigorous hedge accounting rules.

5. Moving off-balance sheet items onto the balance sheet: special purpose entities, derivatives and stock compensation.

6. More disclosure, especially judgments, plans, and assumptions: judgment in applying accounting policies, risk management policies and sensitivity analysis.

7. Balance between relevance and reliability: shifting towards relevance.

1.2.4 INTERNATIONAL ACCOUNTING STANDARDS COMMITTEE

The International Accounting Standards Committee came into existence on 29thJune, 1973 as a result of an agreement by accountancy bodies in Australia, Canada, France, Germany, Japan, Mexico, Netherlands, United States, United Kingdom and Ireland. A revised agreement and constitution were signed in November 1982. The business of IASC is conducted by a Board comprising representatives of up to thirteen countries and up to four organizations having an interest in financial reporting. The objectives of IASC as set out in its constitution are:

a. To formulate and publish in the public interest accounting standards to be observed in the presentation of financial statements and to promote their worldwide acceptance and observance and

b. To work generally for the improvement and harmonisation of regulations, accounting standards and procedures relating to the presentation of financial statements. The relationship between IASC and the International Federation of Accountants (IFAC) is confirmed by the mutual commitments into which they have entered.

The membership of IASC (which is the same as IFAC) acknowledges in the revised agreement that IASC has full and complete autonomy in the setting and issue of International Accounting Standards (IAS). The members agree to support the objectives of

IASC by undertaking the following obligations to support the work of IASC by publishing in their respective countries every international accounting standard approved for issue by the Board of IASC and by using their best endeavours:

1. To ensure that published financial statements comply with international accounting standards in all material respects and disclose the fact of such compliance.

2. To persuade governments and standards setting bodies that published financial statements should comply with international accounting standards in all material respects.

3. To persuade authorities controlling securities markets and the industrial and business community that published financial statements should comply with international accounting standards in all material respects and disclose the fact of such compliance.

4. To ensure that the auditors satisfy themselves that the financial statements comply with international accounting standards in all material respects.

5. To foster acceptance and observance of international accounting standards internationally.

TYPES OF IAS

IAS 1 Presentation of Financial Statements (FRS 3 UK similar, but not identical)

IAS 2 Inventories (SSAP 9 UK similar, but not identical)

IAS 7 Cash Flow Statements (FRS 1 revised UK similar, but not identical)

IAS 8 Accounting Policies, Changes in Accounting Estimates and Errors (FRS 18 UK similar, but not identical)

IAS 10 Events After the Balance Sheet Date (FRS 21 UK)

IAS 11 Construction Contracts (SSAP 9 UK similar, but not identical)

IAS 12 Income Taxes (FRS 16 and 19 UK similar, but not identical)

IAS 16 Property, Plant and Equipment (FRS 15 UK similar, but not identical)

IAS 17 Leases (SSAP 21 UK similar, but not identical)

IAS 18 Revenue (FRS 5 UK similar, but not identical)

IAS 19 Employee Benefits (FRS 17 UK similar, but not identical)

IAS 20 Accounting for Government Grants and Disclosure of Government Assistance (SSAP 4 UK similar, but not identical)

IAS 21 The Effects of Changes in Foreign Exchange Rates (SSAP 20 UK similar, but not identical)

IAS 23 Borrowing Costs (no UK equivalent)

IAS 24 Related Party Disclosures (FRS 8 UK similar, but not identical)

IAS 26 Accounting and Reporting by Retirement Benefit Plans (FRS 17 UK, similar but not identical).

IAS 27 Consolidated and Separate Financial Statements (FRS 2 UK similar, but not identical)

IAS 28 Investments in Associates (FRS 9 UK similar, but not identical)

IAS 29 Financial Reporting in Hyperinflationary Economies (FRS 24 UK)

IAS 31 Interests in Joint Ventures (FRS 9 UK similar, but not identical)

IAS 32 Financial Instruments: Presentation (FRS 25 UK)

IAS 33 Earnings per Share (FRS 22UK)

IAS 34 Interim Financial Reporting (ASB statement interim reports)

IAS 36 Impairment of Assets (FRS 11 UK similar, but not identical)

IAS 37 Provisions, Contingent Liabilities and Contingent Assets (FRS 12 UK, similar but not identical)

IAS 38 Intangible Assets (FRS 10 UK similar)

IAS 39 Financial Instruments: Recognition and Measurement (FRS 26 UK)

IAS 40 Investment Property (SSAP 19 UK similar, but not identical)

IAS 41 Agriculture

1.3 OPERATING STRUCTURE OF IASC

IASC recognises the need to be fully representative and has accordingly made a number of important changes to its structure.

1. The IASC Board

The business of IASC is conducted by the Board assisted by a full-time secretariat. The professional accountancy bodies in thirteen countries are now represented on the Board. It is IASC policy that appointments to the Board will preferably include a minimum of three developing countries. The constitution of IASC provides for up to four international organizations which have an interest in financial reporting to be represented on the Board.

2. The Consultative Group

International organizations representing many of the principal preparers and users of financial statements participate in the consultative group. The consultative group meets regularly with the IASC Board, enabling group members to discuss matters of principle and policy arising from IASC's work, and the practical and conceptual issues which affect the acceptability of international accounting standards.

3. Steering Committee

Steering committees are formed to consider the issue relating to a particular accounting topic. They comprise four members of which at least one is a board member and whenever possible, one is a representative of a developing country. Member bodies not on the IASC Board are invited to participate in steering committees, the costs of which are borne by IASC.

4. Liaison with national standard setting bodies

To be fully aware of the difficulties facing individual national standard-setting bodies, IASC believes close liaison is required. The primary points of contact are through the Board representative or the professional accountancy body in the member country. In addition, the national standard setting bodies are visited by IASC delegations to discuss the various problems of implementation and harmonization of standards.

SELF ASSESSMENT EXERCISE: State and explain the structure of IASC.

1.4 OPERATING PROCEDURES OF IASC

The process of exposure and comment is essential to the success of IASC. As well as providing preparers, auditors and users of financial statements with the opportunity to express their view on the accounting standards to be adopted. It is also essential to the maintenance of the quality of international accounting standards. The procedure of exposure and comment is as follows:

a. The IASC Board selects a topic that is felt to need an international accounting standard and assigns it to a steering committee. All IASC member bodies are invited to submit material for consideration.

b. The steering committee, assisted by the IASC secretariat, considers the issues involved and presents a point outline on the subject to the Board.

c. The steering committee receives the comments of the Board and prepares a preliminary draft of the proposed standard or a statement of principles.

d. Following review by the Board, the draft or statement is circulated to all member bodies for their comments.

e. The steering committee prepares a revised draft, which after approval by at least two-thirds of the Board, is published as an Exposure draft. Comments are invited from all interested parties.

f. At each stage in the consideration drafts, member bodies refer for guidance to the appropriate accounting research committees in their own organizations.

g. At the end of the exposure period (usually six months) comments are submitted to IASC and are considered by the steering committee responsible for the project.

h. The steering committee then submits a revised draft to the Board for approval as an international accounting standard.

i. The issue of a standard requires approval by at least three-quarters of the Board, after which the approved text of the standard is sent to all member bodies for translation and publication.

The above process takes approximately three years. During the process, the IASC Board may decide that the needs of the subject under consideration would be better served by issuing a discussion paper for comments. The intention of such a paper may be to promote discussion of a topic that is not yet ready for an international accounting standard, or to ensure that adequate time is allowed for a full discussion of the various points of view on a complex accounting subject. The monitoring of views and needs on a subject does not stop when an international accounting standard is issued.

IASC constantly reviews the effectiveness of its standards both in terms of practical compliance and of the need for updating. From time to time, IASC revises document to take into account the current position.

SELF ASSESSMENT EXERCISE: Outline the procedure of exposure and comment to the success of IASC.

1.4 CONCLUSION

The IASC or the accountancy profession does not have the power to enforce international agreement or to require compliance with international accounting standards. The success of IASC's effort is dependent upon recognition and support for its work from many different interested groups acting within the limits of their own jurisdiction. Recognition of IASC's work

comes from groups such as the international bodies representing financial institutions, financial executives, trade unions, employers, stock exchanges, lawyers, securities commissions and financial analysts involved in the Board and consultative group. Others include the United Nations (UN), the Organization for Economic Cooperation and Development (OECD) and the International Federation of Accountants.

SUMMARY

In this unit, you would recall that we discussed International Accounting Standards Committee. We discussed the IASC from three perspectives. First, we looked at the purpose and objectives of IASC which discussed the historical background and objectives of IASC considering the relationship with IFAC. Second, the operating structure of IASC which shows; the IASC Board, the consultative group, the steering committee and liaison with national standard-setting bodies. And finally, the operating procedure of IASC which shows how the IAS is developed and approved for use.

1.6 TUTOR MARKED ASSIGNMENT

1. State the objectives of IASC.

2. State the obligations member countries of IASC are expected to do to support the objectives of IASC.

3. List and discuss the operating structure of IASC for setting up standard.

REFERENCES/FURTHER READING

McGregor, W. (1999), "An Insider's View of the Current State and Future of International Accounting Standard Setting". Accounting Horizons, pp 159 –168.

Saudagaran, S. M., and Diga, J. G. (1998), "Accounting Harmonization in ASEAN: Benefits, Models and Policy Issues". Journal of International Accounting Auditing & Taxation 7, pp 21–45.

Walton, P. (1999), "European Harmonization". In International Accounting and Finance Handbook.

Zeff, S. A. (1998), "The Coming Confrontation on International Accounting Standards". The Irish Accounting Review, pp 89 –117.

SELF ASSESSMENT EXERCISE

CONCLUSION

In some cases, standard setting has been the responsibility of the public accounting profession, often with enforcement of the standards achieved by law or government regulation. In other cases, standard setting has been the responsibility of the government. In a few countries, private sector standard setter has been established that is independent of the public accounting profession. The Australian board is private but appointed by and under the oversight of a government agency.

SUMMARY

In this unit, you would recall we discussed international financial reporting standards. We discussed this topic from three sub-units which were restructuring of IASC into IASB, benefits of global accounting standards and recent trends in international financial reporting standards.

We discussed the approval of the proposed restructuring, the key responsibilities of the IASB, specific objectives of the IASB, IASB due process, qualifications of IASB members, standards advisory council and international financial reporting interpretations committee.

Test Questions

1. Describe how the approval for the IASC restructuring was obtained.

2. What are the key responsibilities of IASB?

3. What are the specific objectives of the IASB?

4. Explain the IASB due process.

5. Discuss the qualification of IASB members.

6. Discuss the Standard Advisory Council.

7. Discuss the international financial reporting interpretations committee.

8. State the reasons for having international standard setters.

9. State five benefits of global accounting standards.

10. State the recent trends in international financial reporting standards.

REFERENCES/FURTHER READING

Gernon, H. and Meek, G. K. (2001), Accounting, An International Perspective, New York: McGraw-Hill Higher Education.

Gernon, H. and Wallace, R. S. O. (1995)," International Accounting Research: A Review of Its Ecology, Contending Theories and Methodology". Journal of Accounting Literature 14, pp 54 –106.

Mueller, G. G., Gernon, H. and Meek, G. (1991), Accounting, An International Perspective, Homewood:

Irwin Richard D. Paul, P., and Deloitte, T. T. (2003), "International Financial Reporting Standard". In International Finance and Accounting Handbook, ed. Choi, F. D. S. New York: John Wiley & Sons

UNIT TWO

2.0 BUSINESS COMBINATIONS

Learning Objectives

Understand the economic motivations underlying business combinations.

Learn about alternative forms of business combinations, from both the legal and accounting perspectives.

Introduce accounting concepts for business combinations, emphasizing the acquisition method.

See how firms record fair values of assets and liabilities in an acquisition.

Firms strive to produce economic value added for shareholders. Related to this strategy, expansion has long been regarded as a proper goal of business entities. A business may choose to expand either internally (building its own facilities) or externally (acquiring control of other firms in business combinations). The focus in this chapter will be on why firms often prefer external over internal expansion options and how financial reporting reflects the outcome of these activities. In general terms, business combinations unite previously separate business entities. The overriding objective of business combinations must be increasing profitability; however, many firms can become more efficient by horizontally or vertically integrating operations or by diversifying their risks through conglomerate operations. i. **Horizontal integration** is the combination of firms in the same business lines and markets. The business combinations of Chevron and Texaco, Exxon and Mobil, and Wells Fargo and Wachovia are examples of horizontal integration. The past decade has witnessed significant consolidation activity in banking and other industries.

ii. **Vertical integration** is the combination of firms with operations in different, but successive, stages of production or distribution, or both.

iii. Conglomeration is the combination of firms with unrelated and diverse products or service functions, or both. Firms may diversify to reduce the risk associated with a particular line of business or to even out cyclical earnings, such as might occur in a utility's acquisition of a manufacturing company.

2.2 REASONS FOR BUSINESS COMBINATIONS

If expansion is a proper goal of business enterprise, why would a business expand through combination rather than by building new facilities? Among the many possible reasons are the following:

Cost Advantage.

It is frequently less expensive for a firm to obtain needed facilities through combination than through development. This is particularly true in periods of inflation. Reduction of the total cost for research and development activities was a prime motivation in AT&T's acquisition of NCR. Lower Risk. The purchase of established product lines and markets is usually less risky than developing new products and markets. The risk is especially low when the goal is diversification. Scientists may discover that a certain product provides an environmental or health hazard. A single-product, non-diversified firm may be forced into bankruptcy by such a discovery, while a multiproduct, diversified company is more likely to survive. For companies in industries already plagued with excess manufacturing capacity, business combinations may be the only way to grow.

Fewer Operating Delays.

Plant facilities acquired in a business combination are operative and already meet environmental and other governmental regulations. The time to market is critical, especially in the technology industry. Firms constructing new facilities can expect numerous delays in construction, as well as in getting the necessary governmental approval to commence operations. Environmental impact studies alone can take months or even years to complete.

Avoidance of Takeovers.

Many companies combine to avoid being acquired themselves. Smaller companies tend to be more vulnerable to corporate takeovers; therefore, many of them adopt aggressive buyer strategies to defend against takeover attempts by other companies.

Acquisition of Intangible Assets.

Business combinations bring together both intangible and tangible resources. The acquisition of patents, mineral rights, research, customer databases, or management expertise may be a primary motivating factor in a business combination.

Other Reasons

Firms may choose a business combination over other forms of expansion for business tax advantages (for example, tax-loss carry forwards), for personal income and estate-tax advantages, or for personal reasons. The egos of company management and takeover specialists may also play an important role in some business combinations.

2.2.1 LEGAL FORM OF BUSINESS COMBINATIONS

Business combination is a general term that encompasses all forms of combining previously separate business entities. Such combinations are acquisitions when one corporation acquires the productive assets of another business entity and integrates those assets into its own operations. Business combinations are also acquisitions when one corporation obtains operating control over the productive facilities of another entity by acquiring a majority of its outstanding voting stock. The acquired company need not be dissolved; that is, the acquired company does not have to go out of existence. The terms merger and consolidation are often used as synonyms for acquisitions. However, legally and in accounting there is a difference.

A merger entails the dissolution of all but one of the business entities involved. A consolidation entails the dissolution of all the business entities involved and the formation of a new corporation. A merger occurs when one corporation takes over all the operations of another business entity and that entity is dissolved.

For example, Company A purchases the assets of Company B directly from Company B for cash, other assets, or Company A securities (stocks, bonds, or notes). This business combination is an acquisition, but it is not a merger unless Company B goes out of existence. Alternatively, Company A may purchase the stock of Company B directly from Company B's stockholders for cash, other assets, or Company A securities. This acquisition will give

Company A operating control over Company B's assets. It will not give Company A legal ownership of the assets unless it acquires all the stock of Company B and elects to dissolve Company B (again, a merger).

A consolidation occurs when a new corporation is formed to take over the assets and operations of two or more separate business entities and dissolves the previously separate entities. For example, Company D, a newly formed corporation, may acquire the net assets of Companies E and F by issuing stock directly to Companies E and F. In this case, Companies E and F may continue to hold Company D stock for the benefit of their stockholders (an acquisition), or they may distribute the Company D stock to their stockholders and go out of existence (a consolidation).

In either case, Company D acquires ownership of the assets of Companies E and F. Alternatively, Company D could issue its stock directly to the stockholders of Companies E and F in exchange for a majority of their shares. In this case, Company D controls the assets of Company E and Company F, but it does not obtain legal title unless Companies E and F are dissolved. Company D must acquire all the stock of Companies E and F and dissolve those companies if their business combination is to be a consolidation. If Companies E and F are not dissolved, Company D will operate as a holding company, and Companies E and F will be its subsidiaries.

Future references in this chapter will use the term merger in the technical sense of a business combination in which all but one of the combining companies go out of existence. Similarly, the term consolidation will be used in its technical sense to refer to a business combination in which all the combining companies are dissolved and a new corporation is formed to take over their net assets. Consolidation is also used in accounting to refer to the accounting process of combining parent and subsidiary financial statements, such as in the expressions "principles of consolidation," "consolidation procedures," and "consolidated financial statements." In future chapters, the meanings of the terms will depend on the context in which they are found. Mergers and consolidations do not present special accounting problems or issues after the initial combination, apart from those discussed in

intermediate accounting texts. This is because only one legal and accounting entity survives in a merger or consolidation.

2.2.2 ACCOUNTING CONCEPT OF BUSINESS COMBINATIONS

GAAP defines the accounting concept of a business combination as: A transaction or other event in which an acquirer obtains control of one or more businesses. Transactions sometimes referred to as true mergers or mergers of equals also are business combinations. Note that the accounting concept of a business combination emphasizes the creation of a single entity and the independence of the combining companies before their union. Although one or more of the companies may lose its separate legal identity, dissolution of the legal entities is not necessary within the accounting concept. Previously separate businesses are brought together into one entity when their business resources and operations come under the control of a single management team.

Such control within one business entity is established in business combinations in which:

One or more corporations become subsidiaries.
One company transfers its net assets to another, or
Each company transfers its net assets to a newly formed corporation.

A corporation becomes a **subsidiary** when another corporation acquires a majority (more than 50 percent) of its outstanding voting stock. Thus, one corporation need not acquire all of the stock of another corporation to consummate a business combination. In business combinations in which less than 100 percent of the voting stock of other combining companies is acquired, the combining companies necessarily retain separate legal identities and separate accounting records even though they have become one entity for financial reporting purposes.

Business combinations in which one company transfers its net assets to another can be consummated in a variety of ways, but the acquiring company must acquire substantially all

the net assets in any case. Alternatively, each combining company can transfer its net assets to a newly-formed corporation. Because the newly-formed corporation has no net assets of its own, it issues its stock to the other combining companies or to their stockholders or

2.3 A Brief Background on Accounting for Business Combinations

Accounting for business combinations is one of the most important and interesting topics of accounting theory and practice but complex and controversial at times. Business combinations involve financial transactions of enormous magnitudes, business empires, success stories and personal fortunes, executive genius, and management fiascos. By their nature, they affect the fate of entire companies. Each is unique and must be evaluated in terms of its economic substance, irrespective of its legal form. Historically, much of the controversy concerning accounting requirements for business combinations involved the ***pooling of interests method***, which became generally accepted in 1950. Although there are conceptual difficulties with the pooling method, the underlying problem that arose was the introduction of alternative methods of accounting for business combinations (pooling versus purchase).

Numerous financial interests are involved in a business combination, and alternate accounting procedures may not be neutral with respect to different interests. That is, the individual financial interests and the final plan of combination may be affected by the method of accounting.

Until 2001, accounting requirements for business combinations recognized both the pooling and purchase methods of accounting for business combinations. In August 1999, the FASB issued a report supporting its proposed decision to eliminate pooling. Principal reasons cited included the following:

Pooling provides less relevant information to statement users.

Pooling ignores economic value exchanged in the transaction and makes subsequent performance evaluation impossible.

Comparing firms using the alternative methods is difficult for investors. Pooling creates these problems because it uses historical book values to record combinations, rather than recognizing fair values of net assets at the transaction date. Generally accepted accounting principles (GAAP) generally require recording asset acquisitions at fair values. Further, the FASB believed that the economic notion of a pooling of interests rarely exists in business combinations. More realistically, virtually all combinations are acquisitions, in which one firm gains control over another. GAAP eliminated the pooling of interests method of accounting for all transactions initiated after June 30, 2001. Combinations initiated subsequent to that date must use the acquisition method. Because the new standard prohibited the use of the pooling method only for combinations initiated after the issuance of the revised standard, prior combinations accounted for under the pooling of interests method were grandfathered; that is, both the acquisition and pooling methods continue to exist as acceptable financial reporting practices for past business combinations.

Therefore, one cannot ignore the conditions for reporting requirements under the pooling approach. On the other hand, because no new poolings are permitted, this discussion focuses on the acquisition method.

2.4 INTERNATIONAL ACCOUNTING

Elimination of pooling made GAAP more consistent with international accounting standards. Most major economies prohibit the use of the pooling method to account for business combinations. International Financial Reporting Standards (IFRS) require business combinations to be accounted for using ***the purchase method***, and specifically prohibit ***the pooling of interests method***.

2.5 ACCOUNTING FOR COMBINATIONS AS ACQUISITIONS

GAAP requires that all business combinations initiated after December 15, 2008, be accounted for as acquisitions. The acquisition method follows the same GAAP for recording a business combination as we follow in recording the purchase of other assets and the incurrence of liabilities. We record the combination using the fair value principle. In other

words, we measure the cost to the purchasing entity of acquiring another company in a business combination by the amount of cash disbursed or by the fair value of other assets distributed or securities issued. We expense the direct costs of a business combination (such as accounting, legal, consulting, and finders' fees) other than those for the registration or issuance of equity securities. We charge registration and issuance costs of equity securities issued in a combination against the fair value of securities issued, usually as a reduction of additional paid-in capital. We expense indirect costs such as management salaries, depreciation, and rent under the acquisition method. We also expense indirect costs incurred to close duplicate facilities.

NOTE TO THE STUDENT The topics covered in this text are sometimes complex and involve detailed exhibits and illustrative examples. Understanding the exhibits and illustrations is an integral part of the learning experience, and you should study them in conjunction with the related text. Carefully review the exhibits as they are introduced in the text. Exhibits and illustrations are designed to provide essential information and explanations for understanding the concepts presented. Understanding the financial statement impact of complex business transactions is an important element in the study of advanced financial accounting topics. To assist you in this learning endeavor, this book depicts journal entries that include the types of accounts being affected and the directional impact of the event. ***Conventions used throughout the text are as follows:***

A parenthetical reference added to each account affected by a journal entry indicates the type of account and the effect of the entry. For example, an increase in accounts receivable, an asset account, is denoted as "Accounts receivable (+A)." A decrease in this account is denoted as "Accounts receivable (–A)." The symbol (A) stands for assets, (L) for liabilities, (SE) for stockholders' equity accounts, (R) for revenues, (E) for expenses, (Ga) for gains, and (Lo) for losses.

To illustrate, assume that Pop Corporation issues 100,000 shares of $10 par common stock for the net assets of Son Corporation in a business combination on July 1, 2011. The market price of Pop common stock on this date is $16 per share. Additional direct costs of the business combination consist of Securities and Exchange Commission (SEC) fees of $5,000, accountants' fees in connection with the SEC registration statement of $10,000, costs for

printing and issuing the common stock certificates of $25,000, and finder's and consultants' fees of $80,000.

Pop records the issuance of the 100,000 shares on its books as follows (in thousands):

Investment in Son (+A)	1,600	
Common stock, $10 par (+SE)		1,000
Additional paid-in capital (+SE)		600

To record issuance of 100,000 shares of $10 par common stock with a market price of $16 per share in a business combination with Son Corporation.

Pop records additional direct costs of the business combination as follows:

Investment expense (E, –SE)	80	
Additional paid-in capital (–SE)	40	
Cash (or other net assets) (–A)		120

To record additional direct costs of combining with Son

Corporation: $80,000 for finder's and consultants' fees and $40,000 for registering and issuing equity securities.

We treat registration and issuance costs of $40,000 as a reduction of the fair value of the stock issued and charge these costs to Additional paid-in capital. We expense other direct costs of the business combination ($80,000). The total cost to Pop of acquiring Son is $1,600,000, the amount entered in the Investment in Son account. We accumulate the total cost incurred in purchasing another company in a single investment account, regardless of whether the other combining company is dissolved or the combining companies continue to operate in a parent–subsidiary relationship. If we dissolve Son Corporation, we record its identifiable net assets on Pop's books at fair value, and record any excess of investment cost over fair value of net assets as goodwill. In this case, we allocate the balance recorded in the

Investment in Son account by means of an entry on Pop's books. Such an entry might appear as follows:

Receivables (+A)	XXX
Inventories (+A)	XXX
Plant assets (+A)	XXX
Goodwill (+A)	XXX
Accounts payable (+L)	XXX
Notes payable (+L)	XXX
Investment in Son (-A)	1,600

To record allocation of the $1,600,000 cost of acquiring Son Corporation to identifiable net assets according to their fair values and to goodwill.

If we dissolve Son Corporation, we formally retire the Son Corporation shares. The former Son shareholders are now shareholders of Pop. If Pop and Son Corporations operate as parent company and subsidiary, Pop will not record the entry to allocate the Investment in Son balance. Instead, Pop will account for its investment in Son by means of the Investment in Son account, and we will make the assignment of fair values to identifiable net assets required in the consolidation process. Because of the additional complications of accounting for parent–subsidiary operations, the remainder of this chapter is limited to business combinations in which a single acquiring entity receives the net assets of the other combining companies. Subsequent chapters cover parent-subsidiary operations and the preparation of consolidated financial statements.

2.5.1 Recording Fair Values in an Acquisition

The first step in recording an acquisition is to determine the fair values of all identifiable tangible and intangible assets acquired and liabilities assumed in the combination. This can

be a monumental task, but much of the work is done before and during the negotiating process for the proposed merger. Companies generally retain independent appraisers and valuation experts to determine fair values. GAAP provides guidance on the determination of fair values. There are three levels of reliability for fair value estimates.

Level 1 is fair value based on established market prices.

Level 2 uses the present value of estimated future cash flows, discounted based on an observable measure such as the prime interest rate.

Level 3 includes **other internally-derived estimations**. Throughout the study, we will assume that total fair value is equal to the total market value, ***unless otherwise noted***. We record identifiable assets acquired, liabilities assumed and any noncontrolling interest using fair values at the acquisition date. We determine fair values for all identifiable assets and liabilities, regardless of whether they are recorded on the books of the acquired company. For example, an acquired company may have expensed the costs of developing patents, blueprints, formulas, and the like. However, we assign fair values to such identifiable intangible assets of an acquired company in a business combination accounted for as an acquisition.

Assets acquired and liabilities assumed in a business combination that arise from contingencies should be recognized at fair value if fair value can be reasonably estimated. If fair value of such an asset or liability cannot be reasonably estimated, the asset or liability should be recognized in accordance with general FASB guidelines to account for contingencies, and reasonable estimation of the amount of a loss.

It is expected that most litigation contingencies assumed in an acquisition will be recognized only if a loss is probable and the amount of the loss can be reasonably estimated. There are few exceptions to the use of fair value to record assets acquired and liabilities assumed in an acquisition. Deferred tax assets and liabilities arising in a combination, pensions and other employee benefits, and leases should be accounted for in accordance with normal guidance for these items. We assign no value to the goodwill recorded on the books of an acquired subsidiary because such goodwill is an

unidentifiable asset and because we value the goodwill resulting from the business combination directly:

The acquirer shall recognize goodwill as of the acquisition date, measured as the excess of (a) over (b):

a. The aggregate of the following:

1. The consideration transferred measured in accordance with this Section, which generally requires acquisition-date fair value (see paragraph 805-30-30-7)

2. The fair value of any noncontrolling interest in the acquiree.

3. In a business combination achieved in stages, the acquisition-date fair value of the acquirer's previously held equity interest in the acquiree.

b. The net of the acquisition-date [fair value] amounts of the identifiable assets acquired and the liabilities assumed measured in accordance with this Topic.

2.5.2 RECOGNITIONAND MEASUREMENTOF OTHER INTANGIBLE ASSETS

GAAP clarifies the recognition of intangible assets in business combinations under the acquisition method. Firms should recognize intangibles separate from goodwill only if they fall into the following two categories.

Recognizable intangibles must meet either a separability criterion or a contractual–legal criterion.

GAAP defines intangible assets as either current or noncurrent assets (excluding financial instruments) that lack physical substance. Per GAAP*:*

The acquirer shall recognize separately from goodwill the identifiable intangible assets acquired in a business combination. An intangible asset is identifiable if it meets either the separability criterion or the contractual-legal criterion described in the definition of identifiable.

The separability criterion means that an acquired intangible asset is capable of being separated or divided from the acquiree and sold, transferred, licensed, rented, or exchanged, either individually or together with a related contract, identifiable asset, or liability. An

intangible asset that the acquirer would be able to sell, license, or otherwise exchange for something else of value meets the separability criterion even if the acquirer does not intend to sell, license, or otherwise exchange it. ...

An acquired intangible asset meets the separability criterion if there is evidence of exchange transactions for that type of asset or an asset of a similar type, even if those transactions are infrequent and regardless of whether the acquirer is involved in them. . . .

An intangible asset that is not individually separable from the acquiree or combined entity meets the separability criterion if it is separable in combination with a related contract, identifiable asset, or liability.

Intangible assets that are not separable should be included in goodwill. For example, acquired firms will have a valuable employee workforce in place, but this asset cannot be recognized as an intangible asset separately from goodwill. GAAP (***reproduced in part in Exhibit 1-2***) provides more detailed discussion and an illustrative list of intangible assets that firms can recognize separately from goodwill.

The following guidance presents examples of identifiable intangible assets acquired in a business combination. Some of the examples may have characteristics of assets other than intangible assets. The acquirer should account for those assets in accordance with their substance. The examples are not intended to be all-inclusive.

Intangible assets designated with the symbol # are those that arise from contractual or other legal rights. Those designated with the symbol * do not arise from contractual or other legal rights but are separable. Intangible assets designated with the symbol # might also be separable, but separability is not a necessary condition for an asset to meet the contractual-legal criterion.

Marketing-Related Intangible Assets a. Trademarks, trade names, service marks, collective marks, certification marks, b. Trade dress (unique color, shape, package design), c. Newspaper mastheads, d. Internet domain names, e. Noncompetition agreements

Customer-Related Intangible Assets a. Customer lists, b. Order or production backlog, c. Customer contracts and related customer relationships, d. Non-contractual customer relationships.

Artistic-Related Intangible Assets a. Plays, operas, ballets, b. Books, magazines, newspapers, other literary works, c. Musical works such as compositions, song lyrics, advertising jingles, d.

Pictures, photographs, e. Video and audiovisual material, including motion pictures or films, music videos, television programs.

Contract-Based Intangible Assets

a. Licensing, royalty, standstill agreements, b. Advertising, construction, management, service or supply contracts, c. Lease agreements (whether the acquiree is the lessee or the lessor), d. Construction permits, e. Franchise agreements, f. Operating and broadcast rights, g. Servicing contracts such as mortgage servicing contracts, h. Employment contracts, i. Use rights such as drilling, water, air, timber cutting, and route authorities

Technology-Based Intangible Assets

a. Patented technology, b. Computer software and mask works, c. Unpatented technology, d. Databases, including title plants

2.6 CONTINGENT CONSIDERATIONINAN ACQUISITION

Some business combinations provide for additional payments to the previous stockholders of the acquired company, contingent on future events or transactions. The contingent consideration may include the distribution of cash or other assets or the issuance of debt or equity securities. Contingent consideration in an acquisition must be measured and recorded at fair value as of the acquisition date as part of the consideration transferred in the acquisition. In practice, this requires the acquirer to estimate the amount of consideration it will be liable for when the contingency is resolved in the future. The contingent consideration can be classified as equity or as a liability. An acquirer may agree to issue additional shares of stock to the acquiree if the acquiree meets an earnings goal in the future. Then, the contingent consideration is in the form of equity. At the date of acquisition, the Investment and Paid-in Capital accounts are increased by the fair value of the contingent consideration. Alternatively, an acquirer may agree to pay additional cash to the acquiree if the acquiree meets an earnings goal in the future. Then, the contingent consideration is in the form of a liability. At the date of the acquisition, the Investment and Liability accounts are increased by the fair value of the contingent consideration. The accounting treatment of subsequent changes in the fair value of the contingent consideration depends on whether the contingent consideration is classified as equity or as a liability. If the contingent consideration is in the

form of equity, the acquirer does not re-measure the fair value of the contingency at each reporting date until the contingency is resolved. When the contingency is settled, the change in fair value is reflected in the equity accounts. If the contingent consideration is in the form of a liability, the acquirer measures the fair value of the contingency at each reporting date until the contingency is resolved. Changes in the fair value of the contingent consideration are reported as a gain or loss in earnings, and the liability is also adjusted.

2.7 COST AND FAIR VALUE COMPARED

After assigning fair values to all identifiable assets acquired and liabilities assumed, we compare the investment cost with the total fair value of identifiable assets less liabilities. *If the investment cost exceeds net fair value*, we first *assign it to identifiable net assets according to their fair values* and *then assign the excess to goodwill*. In some business combinations, the total fair value of identifiable assets acquired over liabilities assumed may exceed the cost of the acquired company. GAAP offers accounting procedures to dispose of the excess fair value in this situation. The gain from such a bargain purchase is recognized as an ordinary gain by the acquirer.

	Book value (in thousands $)	Fair value (in thousands $)
Assets		
Cash	50	50
Net receivables	150	140
Inventories	200	250
Land	50	100
Buildings - net	300	500
Equipment-net	250	350
Patents	-	50
Total assets	1,000	1,440
Liabilities		
Accounts payable	60	60
Notes payable	150	135
Other liabilities	40	45

Total liabilities	250	240
Net assets	750	1,200

Example 1: GOODWILL

Pit Corporation pays $400,000 cash and issues 50,000 shares of Pit Corporation $10 par common stock with a market value of $20 per share for the net assets of Sad Company. The following entries record the business combination on the books of Pit Corporation on December 27, 2011.

Investment in Sad Company (+A)	1,400	
Cash (-A)		400
Common stock, $10 par (+SE)		500
Additional paid-in capital (+SE)		500

To record issuance of 50,000 shares of $10 par common stock plus $400,000 cash in a business combination with Sad Company.

Cash (+A)	50	
Net receivables (+A)	140	
Inventories (+A)	250	
Land (+A)	100	
Buildings (+A)	500	
Equipment (+A)	350	
Patents (+A)	50	
Goodwill (+A)	200	
Accounts payable (+L)		60
Notes payable (+L)		135
Other liabilities (+L)		45
Investment in Sad Company (-A)		1,400

To assign the cost of Sad Company to identifiable assets acquired and liabilities assumed on the basis of their fair values and to goodwill.

We assign the amounts to the assets and liabilities based on fair values, except for goodwill. We determine goodwill by subtracting the $1,200,000 fair value of identifiable net assets acquired from the $1,400,000 purchase price for Sad Company's net assets.

Example 2: FAIRVALUEEXCEEDSINVESTMENTCOST (BARGAINPURCHASE)

Pit Corporation issues 40,000 shares of its $10 par common stock with a market value of $20 per share, and it also gives a 10 percent, five-year note payable for $200,000 for the net assets of Sad Company. Pit's books record the Pit/Sad business combination on December 27, 2011, with the following journal entries: Investment in Sad Company (+A) 1,000 Common stock, $10 par (+SE) 400 Additional paid-in capital (+SE) 400 10% Note payable (+L) 200 To record issuance of 40,00 0 shares of $10 par common stock plus a $200,000, 10% note in a business combination with Sad Company.

Cash (+A)	50	
Net receivables (+A)	140	
Inventories (+A)	250	
Land (+A)	100	
Buildings (+A)	500	
Equipment (+A)	350	
Patents (+A) 50		
Accounts payable (+L)		60
Notes payable (+L)		135
Other liabilities (+L)		45
Investment in Sad Company (-A)		1,000
Gain from bargain purchase (Ga, +SE)		200

To assign the cost of Sad Company to identifiable assets acquired and liabilities assumed on the basis of their fair values and to recognize the gain from a bargain purchase.

We assign fair values to the individual asset and liability accounts in this entry in accordance with GAAP provisions for an acquisition. The $1,200,000 fair value of the identifiable net as-sets acquired exceeds the $1,000,000 purchase price by $200,000, so Pit recognizes a $200,000 gain from a bargain purchase.

Bargain purchases are infrequent, but may occur even for very large corporations.

The Goodwill Controversy

GAAP defines goodwill as the excess of the investment cost over the fair value of net assets received. Theoretically, it is a measure of the present value of the combined company's projected future excess earnings over the normal earnings of a similar business. Estimating it

requires considerable speculation. Therefore, the amount that we generally capitalize as goodwill is the portion of the purchase price left over after all other identifiable tangible and intangible assets and liabilities have been valued. Errors in the valuation of other assets will affect the amount capitalized as goodwill. Under current GAAP, goodwill is not amortized. There are also income tax controversies relating to goodwill. In some cases, firms can deduct goodwill amortization for tax purposes over a 15-year period.

2.8 INTERNATIONAL ACCOUNTING FOR GOODWILL

U.S. companies had long complained that the accounting rule for amortizing goodwill put them at a disadvantage in competing against foreign companies for merger partners. Some countries, for example, permit the immediate write-off of goodwill to stockholders' equity. Even though the balance sheet of the combined company may show negative net worth, the company can begin showing income from the merged operations immediately. Current GAAP alleviates these competitive disadvantages.

Companies in most other industrial countries historically capitalized and amortized goodwill acquired in business combinations. The amortization periods vary. For instance, prior to adoption of IFRS, the maximum amortization period in Australia and Sweden was 20 years; in Japan, it was 5 years. Some countries permit deducting goodwill amortization for tax purposes, making short amortization periods popular.

The North American Free Trade Agreement (NAFTA) increased trade and investments between Canada, Mexico, and the United States and also increased the need for the harmonization of accounting standards. The standard-setting bodies of the three trading partners are looking at ways to narrow the differences in accounting standards. Canadian companies no longer amortize goodwill. Canadian GAAP for goodwill is now consistent with the revised U.S. standards. Mexican companies amortize intangibles over the period benefited, not to exceed 20 years. Negative goodwill from business combinations of Mexican companies is reported as a component of stock-holders' equity and is not amortized.

The IASB is successor to the International Accounting Standards Committee (IASC), a private-sector organization formed in 1973 to develop international accounting standards and promote harmonization of accounting standards worldwide. Under current IASB rules, goodwill and other intangible assets having indeterminate lives are no longer amortized but are tested for value impairment. Impairment tests are conducted annually, or more frequently if circumstances indicate a possible impairment. Firms may not reverse previously-recognized impairment losses for good-will. These revisions make the IASB rules consistent with both U.S. and Canadian GAAP. Al-though accounting organizations from all over the world are members, the IASB does not have the authority to require compliance. However, this situation is changing rapidly. The European Union requires IFRS in the financial reporting of all listed firms beginning in 2005. Many other countries are replacing, or considering replacing, their own GAAP with IFRS.

Both the IASB and FASB are working to eliminate differences in accounting for business combinations under IFRS and GAAP. Recently, FASB revised its standards for purchased in-process research and development to harmonize with IFRS requirements. GAAP requires purchased in-process research and development to be capitalized until the research and development phase is complete or the project is abandoned. IFRS also requires capitalization of these costs as a separate and identifiable asset. Under GAAP, this asset will be classified as an intangible asset with an in-definite life and thus will not be amortized.

Current GAAP for business combinations are the result of a joint project with the IASB. The IASB issued a revision of IFRS 3 at the same time FASB revised the standards on business combinations. Some differences still remain. For example, the FASB requires an acquirer to measure the noncontrolling interest in the acquiree at its fair value, while the IASB permits acquirers to record noncontrolling interests at either fair value or a proportionate share of the acquiree's identifiable net assets.

2.8.1 Current GAAP for Goodwill and Other Intangible Assets

GAAP dramatically changed accounting for goodwill in 2001. GAAP maintained the basic computation of goodwill, but the revised standards mitigate many of the previous

controversies. Current GAAP provides clarification and more detailed guidance on when previously unrecorded intangibles should be recognized as assets, which can affect the amount of goodwill that firms recognize. Under current GAAP, firms record goodwill but do not amortize it. Instead, GAAP requires that firms periodically assess goodwill for impairment in its value. An impairment occurs when the recorded value of goodwill is greater than its fair value. We calculate the fair value of goodwill in a manner similar to the original calculation at the date of the acquisition. Should such impairment occur, firms will write down goodwill to a new estimated amount and will record an offsetting loss in calculating net income for the period. Further goodwill amortization is not permitted, and firms may not write goodwill back up to reverse the impact of prior-period amortization charges. Firms no longer amortize goodwill or other intangible assets that have indefinite useful lives. Instead, firms will periodically review these assets (at least annually) and adjust for value impairment. GAAP provides detailed guidance for determining and measuring impairment of goodwill and other intangible assets. GAAP also defines the reporting entity in accounting for intangible assets. Under prior rules, firms treated the acquired entity as a stand-alone reporting entity. GAAP now recognizes that many acquirees are integrated into the operations of the acquirer. GAAP treats goodwill and other intangible assets as assets of the business reporting unit, which is discussed in more detail in a later chapter on segment reporting. A reporting unit is a component of a business for which discrete financial information is available and its operating results are regularly re-viewed by management. Firms report intangible assets, other than those acquired in business combinations, based on their fair value at the acquisition date. Firms allocate the cost of a group of assets acquired (which may include both tangible and intangible assets) to the individual assets based on relative fair values and "shall not give rise to goodwill."

GAAP is specific on accounting for internally developed intangible assets:

Costs of internally developing, maintaining, or restoring intangible assets that are not specifically identifiable, that have indeterminate lives, or that are inherent in a continuing business and related to the entity as a whole, shall be recognized as an expense when incurred.

2.9 RECOGNIZING AND MEASURING IMPAIRMENT LOSSES

The goodwill impairment test is a two-step process. Firms first compare carrying values (book values) to fair values at the business reporting unit level. Carrying value includes the goodwill amount. If fair value is less than the carrying amount, then firms proceed to the second step, measurement of the impairment loss. The second step requires a comparison of the carrying amount of goodwill to its implied fair value. Firms should again make this comparison at the business reporting unit level. If the carrying amount exceeds the implied fair value of the goodwill, the firm must recognize an impairment loss for the difference. The loss amount cannot exceed the carrying amount of the goodwill. Firms can-not reverse previously-recognized impairment losses. Firms should determine the implied fair value of goodwill in the same manner used to originally record the goodwill at the business combination date. Firms allocate the fair value of the reporting unit to all identifiable assets and liabilities as if they purchased the unit on the measurement date. Any excess fair value is the implied fair value of goodwill. Fair value of assets and liabilities is the value at which they could be sold, incurred, or settled in a current arm's-length transaction. GAAP considers quoted market prices as the best indicators of fair values, although these are often unavailable. When market prices are unavailable, firms may determine fair values using market prices of similar assets and liabilities or other commonly used valuation techniques. For example, firms may employ present value techniques to value estimated future cash flows or earnings. Firms may also employ techniques based on multiples of earnings or revenues.

Firms should conduct the impairment test for goodwill at least annually. GAAP requires more-frequent impairment testing if any of the following events occurs:

A significant adverse change in legal factors or in the business climate
An adverse action or assessment by a regulator
Unanticipated competition
A loss of key personnel

A more-likely-than-not expectation that a reporting unit or a significant portion of a reporting unit will be sold or otherwise disposed of

The testing for recoverability under the Impairment or Disposal of Long-Lived Assets Subsections of Subtopic 360-10 of a significant asset group within a reporting unit

Recognition of a goodwill impairment loss in the financial statements of a subsidiary that is a component of a reporting unit

The goodwill impairment testing is complex and may have significant financial statement impact. An entire industry has sprung up to assist companies in making goodwill valuations.

2.9 AMORTIZATION VERSUS NON-AMORTIZATION

Firms must amortize intangibles with a definite useful life over that life. GAAP defines useful life as estimated useful life to the reporting entity. The method of amortization should reflect the expected pattern of consumption of the economic benefits of the intangible. If firms cannot determine a pattern, then they should use straight-line amortization. If intangibles with an indefinite life later have a life that can be estimated, they should be amortized at that point. Firms should periodically review intangibles that are not being amortized for possible impairment loss.

DISCLOSURE REQUIREMENTS

GAAP requires significant disclosures about a business combination. FASB SFAS No. 141(R) requires specific disclosures that are categorized by:

(1) disclosures for the reporting period that includes a business combination,

(2) disclosures when a business combination occurs after a reporting period ends, but before issuance of the financial statements,

(3) disclosures about provisional amounts related to the business combination and

(4) disclosures about adjustments related to business combinations.

The specific information that must be disclosed in the financial statements for the period in which a business combination occurs can be categorized as follows:

General information about the business combination such as the name of the acquired company, a description of the acquired company, the acquisition date, the portion of the acquired company's voting stock acquired, the acquirer's reasons for the acquisition and the manner the acquirer obtained control of the acquiree;

Information about goodwill or a gain from a bargain purchase that results from the business combination;

Nature, terms and fair value of consideration transferred in a business combination;

Details about specific assets acquired, liabilities assumed and any noncontrolling interest recognized in connection with the business combination;

Reduction in acquirer's pre-existing deferred tax asset valuation allowance due to the business combination;

Information about transactions with the acquiree accounted for separately from the business combination;

Details about step acquisitions;

If the acquirer is a public company, additional disclosures are required such as pro forma information.

GAAP requires firms to report material aggregate amounts of goodwill as a separate balance sheet line item. Likewise, firms must show goodwill impairment losses separately in the income statement, as a component of income from continuing operations (unless the impairment relates to discontinued operations). GAAP also provides increased disclosure requirements for intangible assets (which are reproduced in table Exhibit 1-3 below).

For intangible assets acquired either individually or as part of a group of assets (in either an asset acquisition or business combination), all of the following information shall be disclosed in the notes to financial statements in the period of acquisition: a. For intangible assets subject to amortization, all of the following: The total amount assigned and the amount assigned to any major intangible asset class

The amount of any significant residual value, in total and by major intangible asset class.

The weighted-average amortization period, in total and by major intangible asset class

b. For intangible assets not subject to amortization, the total amount assigned and the amount assigned to any major intangible asset class.

c. The amount of research and development assets acquired in a transaction other than a business combination and written off in the period and the line item in the income statement in which the amounts written off are aggregated.

d. For intangible assets with renewal or extension terms, the weighted-average period before the next renewal or extension (both explicit and implicit), by major intangible asset class. This information also shall be disclosed separately for each material business combination or in the aggregate for individually immaterial business combinations that are material collectively if the aggregate fair values of intangible assets acquired, other than goodwill, are significant.

The following information shall be disclosed in the financial statements or the notes to financial statements for each period for which a statement of financial position is presented: a. For intangible assets subject to amortization, all of the following:

The gross carrying amount and accumulated amortization, in total and by major intangible asset class

The aggregate amortization expense for the period

The estimated aggregate amortization expense for each of the five succeeding fiscal years.

For intangible assets not subject to amortization, the total carrying amount and the carrying amount for each major intangible asset class

The entity's accounting policy on the treatment of costs incurred to renew or extend the term of a recognized intangible asset.

For intangible assets that have been renewed or extended in the period for which a statement of financial position is presented, both of the following:

1. For entities that capitalize renewal or extension costs, the total amount of costs incurred in the period to renew or extend the term of a recognized intangible asset, by major intangible asset class

2. The weighted-average period before the next renewal or extension (both explicit and implicit), by major intangible asset class.

For each impairment loss recognized related to an intangible asset, all of the following information shall be disclosed in the notes to financial statements that include the period in which the impairment

loss is recognized:

A description of the impaired intangible asset and the facts and circumstances leading to the impairment

The amount of the impairment loss and the method for determining fair value

The caption in the income statement or the statement of activities in which the impairment loss is aggregated

If applicable, the segment in which the impaired intangible asset is reported under Topic 280

SUMMARY

A business combination occurs when two or more separate businesses join into a single accounting entity. All combinations initiated after December 15, 2008, must be accounted for as acquisitions. Acquisition accounting requires the recording of assets acquired and liabilities assumed at their fair values at the date of the combination. The illustrations in this chapter are for business combinations in which there is only one surviving entity. Later chapters cover accounting for parent–subsidiary operations in which more than one of the combining companies continue to exist as separate legal entities.

QUESTIONS

1. What is the accounting concept of a business combination?

2. Is dissolution of all but one of the separate legal entities necessary in order to have a business combination? Explain.

3. What are the legal distinctions between a business combination, a merger, and a consolidation?

4. When does goodwill result from a business combination? How does goodwill affect reported net income after a business combination?

5. What is a bargain purchase? Describe the accounting procedures necessary to record and account for a bargain purchase.

EXERCISES E 1-1 General questions

1. A business combination in which a new corporation is formed to take over the assets and operations of two or more separate business entities, with the previously separate entities being dissolved, is a/an: a Consolidation b Merger c Pooling of interests d Acquisition

2. In a business combination, the direct costs of registering and issuing equity securities are: a Added to the parent/investor company's investment account b Charged against other paid-in capital of the combined entity c Deducted from income in the period of combination d None of the above

3. An excess of the fair value of net assets acquired in a business combination over the price paid is: a Reported as a gain from a bargain purchase b Applied to a reduction of noncash assets before negative goodwill may be reported c Applied to reduce noncurrent assets other than marketable securities to zero before negative goodwill may be reported d Applied to reduce goodwill to zero before negative goodwill may be reported

4. Cork Corporation acquires Dart Corporation in a business combination. Which of the following would be excluded from the process of assigning fair values to assets and liabilities for purposes of recording the acquisition? (Assume Dart Corporation is dissolved.)

a Patents developed by Dart because the costs were expensed under GAAP

b Dart's mortgage payable because it is fully secured by land that has a market value far in excess of the mortgage

c An asset or liability amount for over- or underfunding of Dart's defined-benefit pension plan

d None of the above

Practical problems

Pat Corporation paid $100,000 cash for the net assets of Sag Company, which consisted of the following:

	Book Value	Fair Value
Current assets	$ 40,000	$ 56,000

Plant and equipment	160,000	220,000
Liabilities assumed	(40,000)	(36,000)
	$160,000	$240,000

Assume Sag Company is dissolved. The plant and equipment acquired in this business combination should be recorded at:

a $220,000 b $200,000 c $183,332 d $180,000

---

2. On April 1, Par Company paid $1,600,000 for all the issued and outstanding common stock of Son Corporation in a transaction properly accounted for as an acquisition. Son Corporation is dissolved. The recorded assets and liabilities of Son Corporation on April 1 follow:

Cash	$160,000
Inventory	480,000
Property and equipment (net of accumulated depreciation of $640,000)	960,000
Liabilities	(360,000)

On April 1, it was determined that the inventory of Son had a fair value of $380,000 and the property and equipment (net) had a fair value of $1,120,000. What is the amount of goodwill resulting from the acquisition?

a 0
b $100,000
c $300,000
d $360,000

Prepare stockholders' equity section

The stockholders' equities of Pal Corporation and Sip Corporation at January 1 were as follows (in thousands):

	Pal	Sip
Capital stock, $10 par	$3,000	$1,600
Other paid-in capital	400	800
Retained earnings	1,200	600
Stockholders' equity	$4,600	$3,000

On January 2, Pal issued 300,000 of its shares with a market value of $20 per share for all of Sip's shares, and Sip was dissolved. On the same day, Pal paid $10,000 to register and issue the shares and $20,000 for other direct costs of combination.

REQUIRED: Prepare the stockholders' equity section of Pal Corporation's balance sheet immediately after the acquisition on January 2. (Hint: Prepare the journal entry.)

Journal entries to record an acquisition

Pan Company issued 480,000 shares of $10 par common stock with a fair value of $10,200,000 for all the voting common stock of Set Company. In addition, Pan incurred the following costs:

Legal fees to arrange the business combination	$100,000
Cost of SEC registration, including accounting and legal fees	48,000
Cost of printing and issuing net stock certificates	12,000
Indirect costs of combining, including allocated overhead and executive salaries	80,000

Immediately before the acquisition in which Set Company was dissolved, Set's assets and equities were as follows (in thousands):

	Book Value	Fair Value
Current assets	$4,000	$4,400
Plant assets	6000	8,800
Liabilities	1,200	1,200
Common stock	8,000	
Retained earnings	800	

REQUIRED: Prepare all journal entries on Pan's books to record the acquisition.

	Pan Book Value	Sis Book Value	Sis Fair Value
Cash	$700	$ 80	$ 80
Inventories	240	160	200
Other current assets	60	40	40
Plant assets—net	520	360	560
Total assets	$1,520	$640	$880
Current liabilities	$320	$ 60	$ 60
Other liabilities	160	100	80
Common stock, $10 par	840	400	
Retained earnings	200	80	
Total liabilities and owners' equity	$1,520	$640	

	Pin	San
Current assets	$ 520	$ 240
Land	200	400
Buildings—net	1,200	400
Equipment—net	880	960
Total assets	$2,800	$2,000
Current liabilities	$ 200	$ 240
Capital stock, $10 par	2,000	800
Additional paid-in capital	200	560
Retained earnings	400	400
Total equities	$2,800	$2,000

Prepare balance sheet after an acquisition

On January 2, 2011, Pet Corporation enters into a business combination with Sea Corporation in which Sea is dissolved. Pet pays $1,650,000 for Sea, the consideration consisting of 66,000 shares of Pet $10 par common stock with a market value of $25 per share. In addition, Pet pays the following expenses in cash at the time of the merger:

Finders' fee	$ 70,000
Accounting and legal fees	130,000
Registration and issuance costs of securities	80,000
	$280,000

Balance sheet and fair value information for the two companies on December 31, 2010, immediately before the merger, is as follows (in thousands):

	Pet Book Value	Sea Book Value	Sea Fair Value
Cash	$ 300	$ 60	$ 60
Accounts receivable—net	460	100	80
Inventories	1,040	160	240
Land	800	200	300
Buildings—net	2,000	400	600
Equipment—net	1,000	600	500
Total assets	$5,600	$1,520	$1,780
Accounts payable	$ 600	$ 80	$ 80
Note payable	1,200	400	360
Capital stock, $10 par	1,600	600	
Other paid-in capital	1,200	100	
Retained earnings	1,000	340	
Total liabilities and owners' equity	$5,600	$1,520	

REQUIRED: Prepare a balance sheet for Pet Corporation as of January 2, 2011, immediately after the merger, assuming the merger is treated as an acquisition.

Journal entries and balance sheet for an acquisition

On January 2, 2011, Par Corporation issues its own $10 par common stock for all the outstanding stock of Sin Corporation in an acquisition. Sin is dissolved. In addition, Par pays $40,000 for registering and issuing securities and $60,000 for other costs of combination. The market price of Par's stock on January 2, 2011, is $60 per share. Relevant balance sheet information for Par and Sin Corporations on December 31, 2010, just before the combination, is as follows (in thousands):

	Par Historical Cost	Sin Historical Cost	Sin Fair Value
Cash	$ 240	$ 20	$ 20
Inventories	100	60	120
Other current assets	200	180	200
Land	160	40	200
Plant and equipment—net	1,300	400	700
Total assets	$ 2,000	$700	$1,240
Liabilities	$ 400	$ 100	$ 100
Capital stock, $10 par	1,000	200	
Additional paid-in capital	400	100	
Retained earnings	200	300	
Total liabilities and owners' equity	$2,000	$700	

REQUIRED

1. Assume that Par issues 25,000 shares of its stock for all of Sin's outstanding shares.
   a. Prepare journal entries to record the acquisition of Sin.
   b. Prepare a balance sheet for Par Corporation immediately after the acquisition.

REFERENCES:

[1] FASB ASC 805-10. Originally Statement of Financial Accounting Standards No. 141(R). "Business Combinations." Norwalk, CT: Financial Accounting Standards Board, 2007.

[2] FASB ASC 805. Originally Statement of Financial Accounting Standards No. 141(R). "Business Combinations." Norwalk, CT: Financial Accounting Standards Board, 2007.

[3] IFRS 3. "Business Combinations." London, UK: International Accounting Standards Board, 2004.

[4] FASB ASC 810-10-5-2. Originally Statement of Financial Accounting Standards No. 141(R)."Business Combinations." Norwalk, CT: Financial Accounting Standards Board, 2007.

[5] FASB ASC 820-10. Originally Statement of Financial Accounting Standards No. 157. "Fair Value Measurements." Norwalk. CT: Financial Accounting Standards Board, 2006.

[6] FASB ASC 750-10. Statement of Financial Accounting Standards No. 2. "Accounting for Research and Development Costs." Stamford, CT: Financial Accounting Standards Board, 1974.

[7] FASB ASC 450. Statement of Financial Accounting Standards No. 5. "Accounting for Contingencies." Stamford, CT: Financial Accounting Standards Board, 1975.

[8] FASB ASC 740. Statement of Financial Accounting Standards No. 109. "Accounting for Income Taxes." Norwalk, CT: Financial Accounting Standards Board, 1992 and FASB Interpretation No. 48. "Accounting for Uncertainty in Income Taxes." Norwalk, CT: Financial Accounting Standards Board, 2006.

[9] FASB ASC 715 and 84010-25. Originally Statement of Financial Accounting Standards No. 158."Employers' Accounting for Defined Benefit Pension and Other Postretirement Plans—An amendment of FASB Statements No 87, 88, 106, and 132R. " Norwalk, CT: Financial Accounting Standards Board, 2006.

[10] FASB ASC 805-20-25. Originally Statement of Financial Accounting Standards No. 141(R). "Busi-ness Combinations." Norwalk, CT: Financial Accounting Standards Board, 2007.

[11] FASB ASC 805-20-55-11 through 55-38. Originally Statement of Financial Accounting Standards No. 141(R). "Business Combinations." Appendix A. Norwalk, CT: Financial Accounting Standards Board, 2007.

[12] FASB ASC 805-30-25-5 through 25-7. Originally Statement of Financial Accounting Standards No. 141(R). "Business Combinations." Norwalk, CT: Financial Accounting Standards Board, 2007.

[13] FASB ASC 805-20-55-11through 55-38. Originally Statement of Financial Accounting Standards No. 141(R). "Business Combinations." Norwalk, CT: Financial Accounting Standards Board, 2007.

[14] FASB ASC 805-30-25-2. Originally Statement of Financial Accounting Standards No. 141(R)."Business Combinations." Norwalk, CT: Financial Accounting Standards Board, 2007.

[15] FASB ASC 805. Originally Statement of Financial Accounting Standards No. 141(R). "Business Combinations." Norwalk, CT: Financial Accounting Standards Board, 2007.

[16] FASB ASC 350-20-35-1. Originally Statement of Financial Accounting Standards No. 142. "Goodwill and Other Intangible Assets." Stamford, CT: Financial Accounting Standards Board, 2001.

[17] FASB ASC 350-20. Originally Statement of Financial Accounting Standards No. 142. "Goodwill and Other Intangible Assets." Stamford, CT: Financial Accounting Standards Board, 2001.

[18] FASB ASC 350-20-35. Originally Statement of Financial Accounting Standards No. 142. "Goodwill and Other Intangible Assets." Stamford, CT: Financial Accounting Standards Board, 2001.

[19] FASB ASC 350-20-35-3. Originally Statement of Financial Accounting Standards No. 142. "Goodwill and Other Intangible Assets." Stamford, CT: Financial Accounting Standards Board, 2001.

UNIT 2

2.0 CONSOLIDATED FINANCIAL STATEMENTS ON DATE OF ACQUISITION

Study objective

The study aims to achieve the following in detail:

To know to deal with treatment of accounts after acquisition process takes place in a consolidated statement

To learn how to treat goodwill/cost of control after an acquisition

To learn on how to deal with ledger accounts

2.1 CONSOLIDATED BALANCE SHEET AT DATE OF ACQUISITION

A consolidated entity is a fictitious (conceptual) reporting entity. It is based on the assumption that the separate legal and accounting entities of a parent and its subsidiaries can be combined into a single meaningful set of financial statements for external reporting purposes. Note that the consolidated entity does not have transactions and does not maintain a consolidated ledger of accounts.

Parent Acquires 100 Percent of Subsidiary at Book Value Exhibit 3-2 shows the basic differences between separate-company and consolidated balance sheets. Pen Corporation acquires 100 percent of Sel Corporation at its book value and fair value of $40,000 in an acquisition on January 1, 2011. Exhibit 3-2 shows the balance sheets prepared immediately after the investment. Pen's "Investment in Sel" appears in the separate balance sheet of Pen, but not in the consolidated balance sheet for Pen and Subsidiary. When preparing the balance sheet, we eliminate the Investment in Sel account (Pen's books) and the stockholders' equity accounts (Sel's books) because they are reciprocal—both representing the net assets of Sel at January 1, 2011. We combine the nonreciprocal accounts of Pen and Sel and include them in the consolidated balance sheet of Pen Corporation and Subsidiary. Note that the consolidated balance sheet is not merely a summation of account balances of the affiliates. We eliminate reciprocal accounts in the process of consolidation and combine only nonreciprocal accounts. The capital stock that appears in a consolidated balance sheet is the capital stock of the parent, and the consolidated retained earnings are the retained earnings of the parent company.

EXHIBIT 3-2 100 Percent Ownership acquired at Book Value (Equal to Fair Value)

(in thousands)	*Separate Balance Sheets*		*Consolidated Balance Sheet:* Pen and Subsidiary
	Pen	Sel	
Assets			
Current assets			
Cash	$ 20	$10	$ 30
Other current assets	45	15	60
Total current assets	65	25	90
Plant assets	75	45	120
Less: Accumulated depreciation	(15)	(5)	(20)
Total plant assets	60	40	100
Investment in Sel—100%	40	—	—
Total assets	$165	$65	$190
Liabilities and Stockholders' Equity			
Current liabilities			
Accounts payable	$ 20	$15	$ 35
Other current liabilities	25	10	35
Total current liabilities	45	25	70
Stockholders' equity			
Capital stock	100	30	100
Retained earnings	20	10	20
Total stockholders' equity	120	40	120
Total liabilities and stockholders' equity	$165	$65	$190

Parent Acquires 100 Percent of Subsidiary—With Goodwill

Exhibit 3-2 presented the consolidated balance sheet prepared for a parent company that acquired all the stock of Sel Corporation at book value. If, instead, Pen acquires all of Sel's stock for $50,000, there will be a $10,000 excess of investment cost over book value acquired ($50,000 investment cost less $40,000 stockholders' equity of Sel). The $10,000 appears in the consolidated balance sheet at acquisition as an asset of $10,000. In the absence of evidence that identifiable net assets are undervalued, this asset is assumed to be goodwill. Exhibit 3-3 illustrates procedures for preparing a consolidated balance sheet for Pen Corporation, assuming that Pen pays $50,000 for the outstanding stock of Sel.

We need only one workpaper entry to consolidate the balance sheets of Pen and Sel at acquisition. Take a few minutes to review the format of the workpaper in Exhibit 3-3 . The first two columns provide information from the separate balance sheets of Pen and Sel. The third column records adjustments and eliminations, subdivided into debits and credits. The last column presents the totals that will appear in the consolidated balance sheet. We calculate amounts in the Consolidated Balance Sheet column by adding together amounts from the first two columns and then add-ing or subtracting the adjustments and eliminations,

as appropriate. This basic workpaper format is used throughout the discussions of acquisitions and preparation of consolidated financial statements in this book. The elimination entry is reproduced in general journal form for convenient reference:

a	Capital stock—Sel (–SE)	30	
	Retained earnings—Sel (–SE)	10	
	Goodwill (+A)	10	
	Investment in Sel (–A)		50
	To eliminate reciprocal investment and equity accounts and to assign the excess of investment cost (fair value) over book value to goodwill.		

Entries such as those shown in Exhibit 3-3 are only workpaper adjustments and eliminations and are not recorded in the accounts of the parent or subsidiary corporations . The entries will never be journalized or posted. Their only purpose is to facilitate completion of the workpapers to consolidate a parent and subsidiary at and for the period ended on a particular date. In this book, workpaper entries are shaded in blue to avoid confusing them with actual journal entries that are recorded in the accounts of the parent and subsidiary companies.

In future periods, the difference between the investment account balance and the subsidiary equity will decline if, and only if, goodwill is written down due to impairment.

Parent Acquires 90 Percent of Subsidiary—With Goodwill

Assume that instead of acquiring all of Sel's outstanding stock, Pen acquires 90 percent of it for $45,000. GAAP requires the acquisition method to record business combinations and subsequent issuance of consolidated financial statements. Essentially, the acquisition method uses the entity theory of consolidations. Under the acquisition method, all assets and liabilities of the subsidiary are reported using 100 percent of fair values at the combination date, based on the price paid by the parent for its controlling interest, even when the parent acquires less than a 100 percent interest. Thus, both the controlling and noncontrolling interests will be reported based on fair values at the acquisition date. GAAP provides guidance for measuring fair values. Fair values are not re-calculated at future reporting

dates, with two exceptions. Impairments of assets must be recorded, including goodwill impairments. In addition, financial assets and liabilities may be revalued under GAAP, but this revaluation is optional.

There are also two major exceptions to the initial recording of fair values for assets and liabilities. Deferred tax assets and liabilities and employee benefit amounts will be recorded at book values consistent with existing GAAP standards (presumably already recorded by the subsidiary). However, recognize that since the subsidiary is recorded at its fair value, differences in fair values and book values of these accounts are reflected in goodwill. They are not separately identified.

EXHIBIT 3-3 100 Percent Ownership, Cost (Fair Value) $10,000 Greater Than Book Value

PEN CORPORATION AND SUBSIDIARY
CONSOLIDATED BALANCE SHEET WORKPAPERS
JANUARY 1, 2011 (IN THOUSANDS)

	Pen	100% Sel	*Adjustments and Eliminations* Debits	Credits	Consolidated Balance Sheet
Assets					
Cash	$ 10	$10			$ 20
Other current assets	45	15			60
Plant assets	75	45			120
Accumulated depreciation	(15)	(5)			(20)
Investment in Sel	50			a 50	
Goodwill			a 10		10
Total assets	$165	$65			$190
Liabilities and Equity					
Accounts payable	$ 20	$15			$ 35
Other current liabilities	25	10			35
Capital stock—Pen	100				100
Retained earnings—Pen	20				20
Capital stock—Sel		30	a 30		
Retained earnings—Sel		10	a 10		
Total liabilities and stockholders' equity	$165	$65			$190

a. To eliminate reciprocal investment and equity accounts and to assign the excess of investment cost (fair value) over book value to goodwill.

We can assume that the acquisition is an "arm's-length" transaction. Pen paid $45,000 for a 90 percent interest. This implies that the total fair value of Sel is $50,000 ($45,000 / 90 percent). In this case, the excess of total fair value over book value of Sel's net identifiable assets and liabilities is $10,000, and there is a noncontrolling interest of $5,000 (10 percent of the $50,000 fair value of Sel's equity). The $10,000 excess of fair value over book value is goodwill. The workpapers in Exhibit 3-4 illustrate procedures for preparing the consolidated balance sheet for Pen and Sel under the 90 percent ownership assumption.

Workpaper entry a eliminates the reciprocal accounts of Pen and Sel and recognizes goodwill and the noncontrolling interest in Sel at the date of acquisition:

a	Capital stock—Sel (–SE)	30	
	Retained earnings—Sel (–SE)	10	
	Goodwill (+A)	10	
	Investment in Sel (–A)		45
	Noncontrolling interest (+SE)		5
	To eliminate reciprocal investment and equity balances, to assign the $10,000 excess of investment fair value ($50,000) over book value ($40,000) to goodwill, and to recognize a $5,000 noncontrolling interest in the net assets of Sel ($50,000 equity × 10% noncontrolling interest).		

2.2 Noncontrolling Interest

We include all assets and liabilities of the subsidiary in the consolidated balance sheet and record the non-controlling interest's share of subsidiary net assets based on fair values separately in stock-holders' equity.

EXHIBIT 3-4 90 Percent Ownership, Fair Value Greater than Book Value

PEN CORPORATION AND SUBSIDIARY
CONSOLIDATED BALANCE SHEET WORKPAPERS
JANUARY 1, 2011 (IN THOUSANDS)

	Pen	90% Sel	*Adjustments and Eliminations* Debits	Credits	Consolidated Balance Sheet
Assets					
Cash	$ 15	$10			$ 25
Other current assets	45	15			60
Plant assets	75	45			120
Accumulated depreciation	(15)	(5)			(20)
Investment in Sel	45			a 45	
Goodwill			a 10		10
Total assets	$165	$65			$195
Liabilities and Equity					
Accounts payable	$ 20	$15			$ 35
Other current liabilities	25	10			35
Capital stock—Pen	100				100
Retained earnings—Pen	20				20
Capital stock—Sel		30	a 30		
Retained earnings—Sel		10	a 10		
	$165	$65			
Noncontrolling interest				a 5	5
Total liabilities and stockholders' equity					$195

a. To eliminate reciprocal investment and equity balances, assign the $10,000 excess of investment fair value ($50,000) over book value ($40,000) to goodwill, and recognize a $5,000 noncontrolling interest in the fair value of net assets of Sel ($50,000 equity × 10% noncontrolling interest).

Workpapers provide the basis of preparing formal financial statements, and the question arises about how the $5,000 noncontrolling interest that appears in Exhibit 3-4 would be

reported in a formal balance sheet. Historically, practice varied with respect to classification. The noncontrolling interest in subsidiaries was generally shown in a single amount in the liability section of the consolidated balance sheet, frequently under the heading of noncurrent liabilities. Conceptually, the classification of noncontrolling stockholder interests as liabilities was inconsistent because the interests of noncontrolling stockholders represent equity investments in the subsidiary net assets by stockholders outside the affiliation structure.

Current GAAP requires:

A noncontrolling interest in a subsidiary should be displayed and labeled in the consolidated balance sheet as a separate component of equity.

Income attributable to the noncontrolling interest is not an expense or a loss but a deduction from consolidated net income to compute income attributable to the controlling interest.

Both components of consolidated net income (net income attributable to non con-trolling interest and net income attributable to controlling interest) should be disclosed on the face of the consolidated income statement.

2.3 CONSOLIDATED BALANCE SHEETS AFTER ACQUISITION

The account balances of both parent and subsidiary change to reflect their separate operations after the parent–subsidiary relationship has been established. Subsequently, we make additional adjustments to eliminate other reciprocal balances. If a consolidated balance sheet is prepared be-tween the date a subsidiary declares and the date it pays dividends, the parent's books will show a dividend receivable account that is the reciprocal of a dividends payable account on the books of the subsidiary. Such balances do not represent amounts receivable or payable outside the affiliated group; therefore, they must be reciprocals that we eliminate in preparing consolidated statements. We also eliminate other intercompany receivables and payables, such as accounts receivable and accounts payable, in preparing consolidated statements. The balance sheets of Pen and Sel Corporations at December 31, 2011, one year after acquisition, contain the following (in thousands):

	Pen	Sel
Cash	$ 27.4	$15
Dividends receivable	9	—
Other current assets	41	28
Plant assets	75	45
Accumulated depreciation	(20)	(8)
Investment in Sel (90%)	54	—
Total assets	$186.4	$80
Accounts payable	$ 30	$15
Dividends payable	—	10
Other current liabilities	20	5
Capital stock	100	30
Retained earnings	36.4	20
Total equities	$186.4	$80

Assumptions

1. Pen acquired a 90 percent interest in Sel for $45,000 on January 1, 2011, when Sel's stockholders' equity at book value was $40,000 (see Exhibit 3-4).

2. The accounts payable of Sel include $5,000 owed to Pen.

3. During 2011 Sel had income of $20,000 and declared $10,000 in dividends.

Exhibit 3-5 presents consolidated balance sheet workpapers reflecting this information. We determine the balance in the Investment in Sel account at December 31, 2011, using the equity method of accounting. Calculations of the December 31, 2011, investment account balance are as follows:

Original investment January 1, 2011	$45,000
Add: 90% of Sel's $20,000 net income for 2011	18,000
Deduct: 90% of Sel's $10,000 dividends for 2011	(9,000)
Investment account balance December 31, 2011	$54,000

Even though the amounts involved are different, the *process* of consolidating balance sheets after acquisition is basically the same as at acquisition. In all cases, we eliminate the amount of the subsidiary investment account and the equity accounts of the subsidiary. We enter the excess of fair value over book value (goodwill in this illustration) in the workpapers during

the process of eliminating reciprocal investment and equity balances. Goodwill does not appear on the books of the parent; we add it to the asset listing when preparing the workpapers. The noncontrolling interest is equal to the percentage of noncontrolling ownership times the fair value of the equity of the subsidiary at the balance sheet date. Consolidated retained earnings equal the parent company's retained earnings.

The workpaper entries necessary to consolidate the balance sheets of Pen and Sel are reproduced in general journal form for convenient reference:

PEN CORPORATION AND SUBSIDIARY
CONSOLIDATED BALANCE SHEET WORKPAPERS
DECEMBER 31, 2011 (IN THOUSANDS)

	Pen	90% Sel	*Adjustments and Eliminations* Debits	Credits	Consolidated Balance Sheet
Assets					
Cash	$ 27.4	$15			$ 42.4
Dividends receivable	9			b 9	
Other current assets	41	28		c 5	64
Plant assets	75	45			120
Accumulated depreciation	(20)	(8)			(28)
Investment in Sel	54			a 54	
Goodwill			a 10		10
Total assets	$186.4	$80			$208.4
Liabilities and Equity					
Accounts payable	$ 30	$15	c 5		$ 40
Dividends payable		10	b 9		1
Other current liabilities	20	5			25
Capital stock—Pen	100				100
Retained earnings—Pen	36.4				36.4
Capital stock—Sel		30	a 30		
Retained earnings—Sel		20	a 20		
	$186.4	$80			
Noncontrolling interest				a 6	6
Total liabilities and stockholders' equity					$208.4

a. To eliminate reciprocal investment and equity balances, record goodwill, and enter the noncontrolling interest ($60,000 × 10%).
b. To eliminate reciprocal dividends receivable and payable amounts (90 percent of $10,000 dividends payable of Sel).
c. To eliminate intercompany accounts receivable and accounts payable

a	Capital stock—Sel (–SE)	30	
	Retained earnings—Sel (–SE)	20	
	Goodwill (+A)	10	
	Investment in Sel (–A)		54
	Noncontrolling interest (+SE)		6
	To eliminate reciprocal investment and equity balances, record goodwill, and enter the noncontrolling interest ($60,000 × 10%).		
b	Dividends payable (–L)	9	
	Dividends receivable (–A)		9
	To eliminate reciprocal dividends receivable and payable amounts (90% of $10,000 dividends payable of Sel).		
c	Accounts payable (–L)	5	
	Other current assets (–A)		5
	To eliminate intercompany accounts receivable and accounts payable.		

UNIT 3

3.0 INTERCOMPANY TRANSACTIONS

The unit aims to guide the students on intercompany transactions and the common methods of accounting for business combinations. It shall help students understand how transactions are treated in the event of either merger or acquisitions.

Learning Objectives

Understand the impact of intercompany profit in inventories on preparing consolidation workpapers.

Apply the concepts of upstream versus downstream inventory transfers.

Defer unrealized inventory profits remaining in the ending inventory.

Recognize realized, previously deferred inventory profits in the beginning inventory.

Adjust calculations of noncontrolling interest amounts in the presence of intercompany inventory profits.

Electronic supplement: Understand differences in consolidation workpaper techniques related to intercompany inventory profits when the parent company uses either an incomplete equity method or the cost method.

3.1 Introduction to intercompany transactions

Intercompany transactions aims to prepare consolidated statements to show the financial position and the results of operations of two or more affiliates as if they were one entity. Therefore, we eliminate the effects of transactions between the affiliates (referred to as intercompany transactions) from consolidated financial statements. Intercompany transactions may result in reciprocal account balances on the books of the affiliates. For example, intercompany sales transactions produce reciprocal sales and purchases (or cost of goods sold) balances, as well as reciprocal balances for accounts receivable and accounts payable. Intercompany loan transactions produce reciprocal notes receivable and payable balances, as well as reciprocal interest income and expense balances. These intercompany transactions are intra-company transactions from the viewpoint of the consolidated entity; therefore, we eliminate their effects in the consolidation process.

GAAP concisely summarizes consolidation procedures: In the preparation of consolidated financial statements, intercompany balances and transactions shall be eliminated. This includes intercompany open account balances, security holdings, sales and purchases, interest, dividends, etc. As consolidated financial statements are based on the assumption that they represent the financial position and operating results of a single economic entity, such statements should not include gain or loss on transactions among the entities in the consolidated group. Accordingly, any intercompany income or loss on assets remaining within the consolidated group shall be eliminated; the concept usually applied for this purpose is profit or loss.

The reason we eliminate intercompany profits and losses is that the management of the parent controls all intercompany transactions, including authorization and pricing, without arm's-length bargaining between the affiliates. In eliminating the effect of intercompany profits and losses from consolidated statements, however, the issue is not whether the

intercompany trans-actions were or were not at arm's length. *The objective is to show the income and financial position of the consolidated entity as they would have appeared if the intercompany transactions had never taken place, irrespective of the amounts involved in such transactions.* The same reasoning applies to the measurement of the investment account and investment income under a one-line consolidation. In the case of a one-line consolidation, however, evidence that intercompany transactions were not at arm's length may necessitate additional adjustments for fair presentation of the parent's income and financial position in separate parent financial statements.

Most intercompany transactions creating gains and losses can be grouped as inventory items, plant assets, and bonds. Consolidation procedures for inventory items are discussed in this chapter, and those for plant assets and bonds are covered in subsequent chapters. Although the discussion and illustrations in this chapter relate to intercompany profit situations, the examples also provide a basis for analyzing and accounting for intercompany losses.

3.2 INTERCOMPANY INVENTORY TRANSACTIONS

Firms recognize revenue when it is realized, that is, when it is earned. For revenue to be earned from the viewpoint of the consolidated entity and must be a sale to outside entities. Revenue on sales between affiliates cannot be recognized until merchandise is sold outside of the consolidated entity. No consolidated income results from transfers between affiliates. The sale of inventory items by one company to an affiliate produces reciprocal sales and purchases accounts when the purchaser has a periodic inventory system, and reciprocal sales and cost of goods sold accounts when the purchaser uses a perpetual inventory system. We eliminate reciprocal sales and cost of goods sold (or purchases) amounts in preparing a consolidated income statement in order to report sales and cost of goods sold for the consolidated entity; eliminating equal sales and cost of goods sold has no effect on consolidated net income.

3.2.1 Elimination of Intercompany Purchases and Sales

We eliminate intercompany sales and purchases (or cost of goods sold) in the consolidation process in order to report consolidated sales and purchases (or cost of goods sold) at amounts purchased from and sold to outside entities. When a periodic inventory system is used, the work-paper entry to eliminate intercompany sales and purchases is simply a debit to sales and a credit to purchases. The workpaper elimination under a perpetual inventory system (used throughout this book) is a debit to sales and a credit to cost of goods sold. The reason is that a perpetual inventory system includes intercompany purchases in a separate cost of goods sold account of the purchasing affiliate when it is sold to outside third parties. These observations are illustrated for Pin Corporation and its subsidiary, Sep Corporation. Pin Corporation formed a subsidiary, Sep Corporation, in 2011 to retail a special line of Pin's merchandise. All Sep's purchases are made from Pin Corporation at 20 percent above Pin's cost. During 2011, Pin sold merchandise that cost $20,000 to Sep for $24,000, and Sep sold all the merchandise to its customers for $30,000. Both Pin and Sep record journal entries relating to the merchandise on their separate books, as follows:

PIN'S BOOKS

Inventory (+A)	20,000	
Accounts payable (+L)		20,000
To record purchases on account from other entities.		
Accounts receivable—Sep (+A)	24,000	
Sales (R, +SE)		24,000
To record intercompany sales to Sep.		
Cost of sales (E, −SE)	20,000	
Inventory (−A)		20,000
To record cost of sales to Sep.		

SEP'S BOOKS

Inventory (+A)	24,000	
Accounts payable—Pin (+L)		24,000
To record intercompany purchases from Pin.		
Accounts receivable (+A)	30,000	
Sales (R, +SE)		30,000
To record sales to customers outside the consolidated entity.		
Cost of sales (E, −SE)	24,000	
Inventory (−A)		24,000
To record cost of sales to customers.		

At year-end 2011, Pin's sales include $24,000 sold to Sep, and its cost of sales includes the $20,000 cost of merchandise transferred to Sep. Sep's sales consist of $30,000 in merchandise sold to other entities, and its cost of sales consists of the $24,000 transfer price from Pin. Pin and Sep are considered one entity for reporting purposes, so combined sales and cost of sales are overstated by $24,000. We eliminate that overstatement in the consolidation work papers, where measurements for consolidated sales and cost of sales are finalized. The work paper elimination is as follows:

	Pin	100% Sep	Adjustments and Eliminations		Consolidated
Sales	$24,000	$30,000	a 24,000		$30,000
Cost of sales	20,000	24,000		a 24,000	20,000
Gross profit	$ 4,000	$ 6,000			$10,000

The workpaper elimination has no effect on consolidated net income because it eliminates equal sales and cost of sales amounts, and combined gross profit equals consolidated gross profit . How-ever, the elimination is necessary to reflect merchandising activity accurately for the consolidated entity that purchased merchandise for $20,000 (Pin) and sold it for $30,000 (Sep). The fact that Pin's separate records include $4,000 gross profit on the merchandise and Sep's records show $6,000 is irrelevant in reporting the consolidated results of operations. In addition to eliminating intercompany profit items, it is necessary to eliminate intercompany receivables and payables in consolidation.

3.2.2 Elimination of Unrealized Profit in Ending Inventory

The consolidated entity realizes and recognizes the full amount of intercompany profit on sales between affiliates in the period in which the merchandise is resold to outside entities. Until reselling the merchandise, any profit or loss on intercompany sales is unrealized, and we must eliminate its effect in the consolidation process. The ending inventory of the purchasing affiliate reflects any unrealized profit or loss on intercompany sales because that inventory reflects the intercompany transfer price rather than cost to the consolidated entity. The elimination is a debit to cost of goods sold and a credit to the ending inventory for the amount of unrealized profit. The credit reduces the inventory to its cost basis to the

consolidated entity; and the debit to cost of goods sold increases cost of goods sold to its cost basis. These relationships are illustrated by continuing the Pin and Sep example for 2012. During 2012 Pin sold merchandise that cost $30,000 to Sep for $36,000, and Sep sold all but $6,000 of this merchandise to its customers for $37,500. Journal entries relating to the merchandise transferred intercompany during 2012 are as follows:

PIN'S BOOKS

Inventory (+A)	30,000	
Accounts payable (+L)		30,000
To record purchase on account from other entities.		
Accounts receivable—Sep (+A)	36,000	
Sales (R, +SE)		36,000
To record intercompany sales to Sep.		
Cost of sales (E, −SE)	30,000	
Inventory (−A)		30,000
To record cost of sales to Sep.		

SEP'S BOOKS

Inventory (+A)	36,000	
Accounts payable—Pin (+L)		36,000
To record intercompany purchases from Pin.		
Accounts receivable (+A)	37,500	
Sales (R, +SE)		37,500
To record sales to customers outside the consolidated entity.		
Cost of sales (E, −SE)	30,000	
Inventory (−A)		30,000
To record cost of sales to outside entities.		

Pin's sales for 2012 include $36,000 sold to Sep, and its cost of sales reflects the $30,000 cost of merchandise transferred to Sep. Sep's $37,500 sales for 2012 consist of merchandise acquired from Pin, and its $30,000 cost of sales equals 5/6, or $30,000/$36,000, of the $36,000 transfer price of merchandise acquired from Pin. The remaining merchandise acquired from Pin in 2012 stays in Sep's December 31, 2012, inventory at the $6,000 transfer price, which includes $1,000 unrealized profit.

Workpaper Entries The consolidated entity views this as an intercompany transfer of merchan-dise that cost $30,000:

$25,000 (or 5/6) of this merchandise was then sold to outside entities for $37,500.

$5,000 (or 1/6) remains in inventory at year-end.

The consolidated entity realizes a gross profit of $12,500.

We accomplish these consolidated results through workpaper entries that eliminate the effects of the intercompany transactions from sales, cost of sales, and inventory. Although a single entry can be made to reduce combined sales by $36,000, combined cost of sales by $35,000, and inventory by $1,000, two entries are ordinarily used in order to separate the elimination of intercompany sales and cost of sales from the elimination (deferral) of unrealized profit.

The eliminations follow:

	Pin	Sep	Adjustments and Eliminations		Consolidated
Income Statement					
Sales	$36,000	$37,500	a 36,000		$37,500
Cost of sales	30,000	30,000	b 1,000	a 36,000	25,000
Gross profit	$ 6,000	$ 7,500			$12,500
Balance Sheet					
Inventory		$ 6,000		b 1,000	$ 5,000

The first entry eliminates intercompany sales and cost of sales, journalized as follows:

a	Sales (–R, –SE)	36,000	
	Cost of sales (–E, +SE)		36,000
	To eliminate intercompany sales and cost of sales.		

This entry is procedurally the same as the one made in 2011 to eliminate intercompany cost of sales and sales.

A secondary entry defers the $1,000 intercompany profit that remains unrealized ($13,500 combined gross profit – $12,500 consolidated gross profit) and reduces the ending inventory from $6,000 to its $5,000 cost to the consolidated entity:

b Cost of sales (E, – SE) 1,000

Inventory (– A) 1,000

To eliminate intercompany profit from cost of sales and inventory

The debit to cost of sales reduces profit by increasing consolidated cost of sales, and the credit reduces the valuation of inventory for consolidated statement purposes from the intercompany transfer price to cost. From the viewpoint of the consolidated entity, Sep overstated its ending inventory by the $1,000 unrealized profit. An overstated ending inventory understates cost of sales and overstates gross profit, so we correct the error with entry b, which increases (debits) cost of sales and decreases (credits) the overstated ending inventory. This elimination reduces consolidated gross profit by $1,000 (income effect) and consolidated ending inventory by $1,000 (balance sheet effect).

On December 31, 2012, Pin computes its investment income in the usual manner, except that Pin defers $1,000 intercompany profit. Pin's one-line consolidation entry reduces income from Sep by the $1,000 unrealized profit in the ending inventory and accordingly reduces the Investment in Sep account by $1,000.

Recognition of Unrealized Profit in Beginning Inventory

Unrealized profit in an ending inventory is realized for consolidated statement purposes when the merchandise is sold outside the consolidated entity. Ordinarily, realization occurs in the immediately succeeding fiscal period, so firms simply defer recognition for consolidated statement purposes until the following year. Recognition of the previously unrealized profit requires a workpaper credit to cost of goods sold because the amount of the beginning inventory is reflected in cost of goods sold when the perpetual system is used. The direction of the sale, noncontrolling ownership percentage, and parent method of accounting for the subsidiary may complicate the related workpaper debits. These complications do not affect consolidated gross profit, however, and we extend the previous example to reflect 2013 operations for Pin and Sep.

During 2013, Pin Corporation sold merchandise that cost $40,000 to Sep for $48,000, and Sep sold 75 percent of the merchandise for $45,000. Sep also sold the items in the beginning

inventory with a transfer price of $6,000 to its customers for $7,500. Journal entries relating to the merchandise transferred intercompany follow:

PIN'S BOOKS		
Inventory (+A)	40,000	
Accounts payable (+L)		40,000
To record purchase on account from other entities.		
Accounts receivable—Sep (+A)	48,000	
Sales (R, +SE)		48,000
To record intercompany sales to Sep.		
Cost of sales (E, −SE)	40,000	
Inventory (−A)		40,000
To record cost of sales to Sep.		
Sep's Books		
Inventory (+A)	48,000	
Accounts payable—Pin (+L)		48,000
To record intercompany purchases from Pin.		
Accounts receivable (+A)	52,500	
Sales (R, +SE)		52,500
To record sales of $45,000 and $7,500 to outside entities.		
Cost of sales (E, −SE)	42,000	
Inventory (−A)		42,000
To record cost of sales ($48,000 transfer price × 75% sold) and $6,000 from beginning inventory.		

Sep sold 75 percent of the merchandise purchased from Pin, so its ending inventory in 2013 is $12,000 ($48,000 × 25%), and that inventory includes $2,000 unrealized profit [$12,000-($12,000/1.2 transfer price)].

WORKPAPER ENTRIES

From the viewpoint of the consolidated entity, merchandise that cost $40,000 was transferred intercompany:

■ $30,000 of this merchandise, plus $5,000 beginning inventory, was sold for $52,500.

■ $10,000 remained in inventory at year-end 2013.

■ The consolidated entity realized a gross profit of $17,500.

The workpapers that eliminate the effects of intercompany transactions from sales, cost of sales, and inventory reflect these consolidated results. Three workpaper entries eliminate

inter-company cost of sales and sales, recognize previously deferred profit from beginning inventory, and defer unrealized profit in the ending inventory, as follows:

	Pin	Sep	Adjustments and Eliminations		Consolidated
Income Statement					
Sales	$48,000	$52,500	a 48,000		$52,500
Cost of sales	40,000	42,000	c 2,000	a 48,000	
				b 1,000	35,000
Gross profit	$ 8,000	$10,500			$17,500
Balance Sheet					
Inventory		$12,000		c 2,000	$10,000
Investment in Sep	XXX		b 1,000		

Journal entries to eliminate the effects of intercompany transactions between Pin and Sep for 2013 follow:

a	Sales (–R, –SE)	48,000	
	Cost of sales (–E, +SE)		48,000
	To eliminate intercompany cost of sales and sales.		
b	Investment in Sep (+A)	1,000	
	Cost of sales (–E, +SE)		1,000
	To recognize previously deferred profit from beginning inventory.		
c	Cost of sales (E, –SE)	2,000	
	Inventory (–A)		2,000
	To defer unrealized profit in ending inventory.		

Workpaper entries a and c are procedurally the same as the entries for 2012. Their purpose is to eliminate intercompany cost of sales and sales and defer unrealized profit in the ending inventory. From the consolidated viewpoint, the $1,000 overstated beginning inventory overstates cost of sales in 2013. Entry b recognizes previously deferred profit from 2012 by reducing consolidated cost of sales and thereby increasing consolidated gross profit. (Note, of course, that entry b is made only in those cases in which the inventory has subsequently been sold to a customer outside the consolidated entity.) The related debit to the Investment in Sep account adjusts for the one-line consolidation entry that reduced the Investment in Sep account in 2012 to defer unrealized profit in the ending inventory of that year. Although the credit side of this entry is always the same, additional complexities

sometimes arise with the debit side of the entry. The Pin–Sep example illustrates the effects of intercompany inventory transactions on consolidated sales, cost of sales, and gross profit, and these effects are always the same. But the example did not cover the effects of intercompany inventory transactions on noncontrolling interest computations or on parent accounting under the equity method. These ramifications are discussed and illustrated next.

3.3 DOWNSTREAM AND UPSTREAM SALES

A downstream sale is a sale by a parent to a subsidiary, and a sale by a subsidiary to its parent is an upstream sale. The upstream and downstream designations relate to the usual diagram of affiliation structures that places the parent at the top. Thus, sales from top to bottom are downstream, and sales from bottom to top are upstream.

Consolidated statements eliminate reciprocal sales and cost of goods sold amounts regardless of whether the sales are upstream or downstream. We also eliminate any unrealized gross profit in ending inventory in its entirety for both downstream and upstream sales. However, the effect of unrealized profits in ending inventory on separate parent statements (as investor) and on consolidated financial statements (which show income to the controlling and noncontrolling stockholders) is determined by both the direction of the intercompany sales activity and the percentage ownership of the subsidiary, except for 100 percent-owned subsidiaries that have no noncontrolling ownership.

In the case of downstream sales, the parent's separate income includes the full amount of any unrealized profit (included in its sales and cost of sales accounts), and the subsidiary's income is unaffected. When sales are upstream, the subsidiary's net income includes the full amount of any unrealized profit (included in its sales and cost of sales accounts), and the parent's separate income is unaffected. The consolidation process eliminates the full amount of intercompany sales and cost of sales, regardless of whether the sales are downstream or upstream. However, the noncontrolling interest share may be affected if the subsidiary's net income includes unrealized profit (the upstream situation). It is not affected if the parent's separate income includes unrealized profit (the downstream situation) because the noncontrolling shareholders have an interest only in the income of the subsidiary. When

subsidiary net income is overstated (from the viewpoint of the consolidated entity) because it includes unrealized profit, the income allocated to noncontrolling interests should be based on the realized income of the subsidiary. A subsidiary's realized income is its reported net income adjusted for intercompany profits from upstream sales.

Noncontrolling interest share may be affected by unrealized profit from upstream sales because accounting standards are not definitive with respect to the computation. GAAP provides that elimination of intercompany profit or loss may be allocated proportionately between controlling and noncontrolling interests but does not require such allocation. The alternative to allocation is to eliminate intercompany profits and losses from upstream sales in the same manner as for down-stream sales, debiting (crediting) the full amount of unrealized gain (loss) to the parent's income.

The approach that allocates unrealized profits and losses from upstream sales proportionately between noncontrolling and controlling interests is conceptually superior because it applies the viewpoint of the consolidated entity consistently to both controlling and noncontrolling interests. That is, both controlling share of consolidated income and noncontrolling interest share are computed on the basis of income that is realized from the viewpoint of the consolidated entity. In addition, material amounts of unrealized profits and losses from upstream sales may be allocated between controlling and noncontrolling interests in accounting practice. *Accordingly, unrealized profits and losses from upstream sales are allocated proportionately between consolidated net in-come (controlling interests) and noncontrolling interest share (noncontrolling interests) through-out this book*. Using the same allocation approach in accounting for the parent/investor's interest under the equity method accomplishes a consistent treatment between consolidation procedures and equity method accounting (the one-line consolidation).

3.3.1 Downstream and Upstream Effects on Income Computations

Assume that the separate incomes of a parent and its 80 percent-owned subsidiary for 2011 are as follows (in thousands):

	Parent	Subsidiary
Sales	$600	$300
Cost of sales	300	180
Gross profit	300	120
Expenses	100	70
Parent's separate income	$200	
Subsidiary's net income		$ 50

Intercompany sales during the year are $100,000, and the December 31, 2011, inventory includes $20,000 unrealized profit.

3.4 NONCONTROLLING INTEREST SHARE COMPUTATION

If the intercompany sales are downstream, the parent's sales and cost of sales accounts reflect the $20,000 unrealized profit, and the subsidiary's $50,000 net income is equal to its realized income. In this case the noncontrolling interest share computation is unaffected by the intercompany transactions and is computed as

$50,000 net income of subsidiary * 20% = $10,000

Consolidate income Effect of Downstream and Upstream sales

PARENT CORPORATION AND SUBSIDIARY CONSOLIDATED INCOME STATEMENT (IN THOUSANDS) FOR THE YEAR ENDED DECEMBER 31, 2011		
	Downstream Sales	Upstream Sales
Sales ($900 − $100)	$800	$800
Cost of sales (480 + $20 − $100)	400	400
Gross profit	400	400
Expenses ($100 + $70)	170	170
Consolidated net income	$230	$230
Less: Noncontrolling interest share	10	6
Controlling interest share of consolidated net income	$220	$224

If the intercompany sales are upstream, the subsidiary's sales and cost of sales accounts reflect the $20,000 unrealized profit, and the subsidiary's realized income is $30,000. In this case the non-controlling interest share computation is

($50,000 net income of subsidiary - $20,000 unrealized) * 20% = $6,000

3.5 CONSOLIDATED NET INCOME COMPUTATION

Exhibit 5-1 shows comparative consolidated income statements for the parent and its 80 percent-owned subsidiary under the two assumptions. In examining the exhibit, note that the only difference in the computation of controlling interest share of consolidated net income under the two assumptions lies in the computation of noncontrolling interest share. This is so because the eliminations for intercompany cost of sales and sales and intercompany inventory profits are the same regardless of whether the sales are downstream or upstream. Parent net income under the equity method is equal to the controlling share of consolidated net income, so the approach used in computing income from subsidiary must be consistent with the approach used in determining consolidated net income. For downstream sales, the full amount of unrealized profit is charged against the income from subsidiary, but for upstream sales, only the parent's proportionate share is charged against its investment income from subsidiary. Computations are as follows (in thousands):

	Downstream	Upstream
Parent's separate income	$200	$200
Add: Income from subsidiary		
Downstream		
Equity in subsidiary's reported income less unrealized profit [($50,000 × 80%) − $20,000]	20	
Upstream		
Equity in subsidiary realized income [($50,000 − $20,000) × 80%]		24
Parent net income	$220	$224

Recognize that affiliates may engage in simultaneous upstream and downstream inventory transactions. In such cases, it is necessary to eliminate both the upstream and downstream sales/cost of sales. These transactions do not simply offset one another, due to the deferral of unrealized intercompany inventory profits. For example, assume that the parent sells $100,000 of inventory to its wholly-owned subsidiary at a profit of $20,000. The entire inventory remains unsold at year-end. The subsidiary company likewise sells $100,000 of inventory to the parent, including an identical intercompany inventory profit of $20,000. This inventory also remains unsold at year-end. We could simply assume that the two transactions are offsetting. However, this would distort both the consolidated balance sheet and income statement. The combined parent and subsidiary balance sheets include the inventory at the total intercompany transfer price of $200,000. However, $40,000 of this total is intercompany profit. The correct consolidated balance sheet inventory should be the cost of $160,000. We would also overstate consolidated net income by $40,000. The intercompany profit must be deferred until the affiliates realize the gains through sales to parties outside the consolidated entity. We can avoid these misstatements only if we separately eliminate the effects of all upstream and downstream transactions. Notice that intercompany inventory transactions provide a convenient means of managing reported consolidated net income if the impact of simultaneous upstream and downstream sales is not properly eliminated.

3.6 SUMMARY

Intercompany sales and purchases of inventory items result in reciprocal sales and cost of goods sold amounts that do not reflect merchandising activity of the consolidated entity. These intercompany transactions also give rise to unrealized intercompany profits. The

consolidated entity defers recognition of these profits until they can be realized by subsequent sales to parties outside the consolidated entity.

The direction of intercompany sales is important, except for consolidated companies with only 100 percent-owned subsidiaries. We deduct the full amount of the unrealized intercompany profit from downstream sales against parent and consolidated net income. In the case of upstream sales, however, we deduct unrealized profits from consolidated net income and noncontrolling interest share on the basis of controlling and noncontrolling ownership. Intercompany profits that are deferred in one period are subsequently recognized in the period in which the related inventory items are sold to nonaffiliated entities. Exhibit 5-9 presents a summary illustration of the effect of inter-company profit eliminations on parent and consolidated net income.

Under the assumption that Parent (P) sells to Subsidiary (S), P's net income and the controlling share of consolidated net income are exactly the same as if the sales had never taken place. In that case, P's separate income would have been $95,000 ($100,000 + $5,000 - $10,000), and P's income from S would have been $45,000 ($50,000 * 90%), for a total of $140,000. Under the assumption that S sells to P, P's net income and the controlling share of consolidated net income are exactly the same as if the intercompany sales had never taken place. In that case, P's income would have been $100,000 (as given), and S's net income would have been $45,000 ($50,000 + $5,000 - $10,000).

Summary Illustration—Unrealized Inventory Profits

Assumptions

1. Parent company's income, excluding income from subsidiary, is $100,000.
2. 90%-owned subsidiary reports net income of $50,000.
3. Unrealized profit in beginning inventory is $5,000. (Sold in current year.)
4. Unrealized profit in ending inventory is $10,000.

	Downstream: Assume That P Sells to S	Upstream: Assume That S Sells to P
P's Net Income—Equity Method		
P's separate income	$100,000	$100,000
P's share of S's reported net income: ($50,000 × 90%)	45,000	45,000
Add: Unrealized profit in beginning inventory: ($5,000 × 100%)	5,000	
($5,000 × 90%)		4,500
Deduct: Unrealized profit in ending inventory: ($10,000 × 100%)	(10,000)	
($10,000 × 90%)		(9,000)
P's net income	$140,000	$140,500
Controlling share of Consolidated Net Income		
P's separate income plus S's net income	$150,000	$150,000
Adjustments for unrealized profits:		
Beginning inventory ($5,000 × 100%)	5,000	5,000
Ending inventory ($10,000 × 100%)	(10,000)	(10,000)
Total realized income	145,000	145,000
Less: Noncontrolling interest share: ($50,000 × 10%)	(5,000)	
($50,000 + $5,000—$10,000) × 10%		(4,500)
Controlling share of consolidated net income	$140,000	$140,500

P's $100,000 separate income plus P's income from S of $40,500 ($45,000 x 90%) is equal to P's net income and the controlling share of consolidated net income.

QUESTIONS

The effect of unrealized profits and losses on sales between affiliated companies is eliminated in preparing consolidated financial statements. When are profits and losses on such sales realized for consolidated statement purposes?

In eliminating unrealized profit on intercompany sales of inventory items, should gross profit or net profit be eliminated?

Is the amount of intercompany profit to be eliminated from consolidated financial statements affected by the existence of a noncontrolling interest? Explain.

What effect does the elimination of intercompany sales and cost of goods sold have on consolidated net income?

What effect does the elimination of intercompany accounts receivable and accounts payable have on consolidated working capital?

Explain the designations upstream sales and downstream sales. Of what significance are these designations in computing parent and consolidated net income?

Would failure to eliminate unrealized profit in inventories at December 31, 2011, have any effect on consolidated net income in 2012? 2013?

Under what circumstances is noncontrolling interest share affected by intercompany sales activity?

How does a parent adjust its investment income for unrealized profit on sales it makes to its subsidiaries (a) in the year of the sale and (b) in the year in which the subsidiaries sell the related merchandise to outsiders?

How is the combined cost of goods sold affected by unrealized profit in (a) the beginning inventory of the subsidiary and (b) the ending inventory of the subsidiary?

Is the effect of unrealized profit on consolidated cost of goods sold influenced by (a) the existence of a noncontrolling interest and (b) the direction of intercompany sales?

Unrealized profit in the ending inventory is eliminated in consolidation workpapers by increasing cost of sales and decreasing the inventory account. How is unrealized profit in the beginning inventory reflected in the consolidation workpapers?

Describe the computation of noncontrolling interest share in a year in which there is unrealized inventory profit from upstream sales in both the beginning and ending inventories of the parent.

Consolidation workpaper procedures are usually based on the assumption that any unrealized profit in the beginning inventory of one year is realized through sales in the following year. If the related merchandise is not sold in the succeeding period, would the assumption result in an incorrect measurement of consolidated net income?

Further questions

Pet Corporation sells inventory items for $500,000 to Sen Corporation, its 80 percent-owned subsidiary. The consolidated workpaper entry to eliminate the effect of this intercompany sale will include a debit to sales for:

a $500,000

b $400,000

c The amount remaining in Sen's ending inventory

d 80 percent of the amount remaining in Sen's ending inventory

Car Company had the following transactions with affiliated parties during 2011.

■ Sales of $180,000 to Den, with $60,000 gross profit. Den had $45,000 of this inventory on hand at year-end. Car owns a 15 percent interest in Den and does not exert significant influence.

■ Purchases of raw materials totaling $720,000 from Ken Corporation, a wholly owned subsidiary. Ken's gross profit on the sale was $144,000. Car had $180,000 of this inventory remaining on December 31, 2011.

Required: Before eliminating entries, Car had consolidated current assets of $960,000. What amount should Car report in its December 31, 2011, consolidated balance sheet for current assets?

a $960,000

b $951,000

c $924,000

d $303,000

UNIT 4

4.0 Methods of Accounting for Combination/Amalgamation

Learning Objectives

After studying this unit, you will be able to

Appreciate the concept of transferee company and the transferor company.

Calculate purchase consideration under both the methods of amalgamation as per AS 14.

Pass the entries to close the books of the vendor company.

Pass the journal entries in the books of purchasing company to incorporate the assets and liabilities of the vendor company and also giving effect to other adjustments.

Account the adjustments made at the time of internal reconstruction.

Earlier we had discussed in detail about business combination/ amalgamation. In this unit we shall only focus on methods of accounting for business combination.

4.1 TYPES OF AMALGAMATION

Amalgamations'. The standard recognises two types of amalgamation - (*a*) amalgamation in the nature of merger and (*b*) amalgamation in the nature of purchase.

Amalgamation in the nature of merger is an amalgamation which satisfies all the following conditions:

(*i*) All the assets and liabilities of the transferor company become, after amalgamation, the assets and liabilities of the transferee company.

(*ii*) Shareholders holding not less than 90% of the face value of the equity shares of the transferor company (other than the equity shares already held therein, immediately before the amalgamation, by the transferee company or its subsidiaries or their nominees) become equity shareholders of the transferee company by virtue of the amalgamation.

(*iii*) The consideration for the amalgamation receivable by those equity shareholders of the transferor company who agree to become equity shareholders of the transferee company is discharged by the transferee company wholly by the issue of equity shares in the transferee company, except that cash may be paid in respect of any fractional shares.

(*iv*) The business of the transferor company is intended to be carried on, after the amalgamation, by the transferee company.

(*v*) No adjustment is intended to be made to the book values of the assets and liabilities of the transferor company when they are incorporated in the financial statements of the transferee company except to ensure uniformity of accounting policies.

If any one or more of the above conditions are not satisfied in an amalgamation, such amalgamation is called *amalgamation in the nature of purchase.*

4.1.1 PURCHASE CONSIDERATION

For the purpose of accounting for amalgamations, we are essentially guided by AS-14 'Accounting for Amalgamations'. Para 3(*g*) of AS-14 defines the term purchase consideration as the "aggregate of the shares and other securities issued and the payment made in the form of cash or other assets by the transferee company to the shareholders of the transferor company". Therefore purchase consideration does not include the sum which the transferee company will directly pay to the creditors of the transferor company. The purchase consideration essentially depends upon the fair value of its elements. For example, when the consideration includes securities, the value fixed by the statutory authority may be taken as the fair value. In case of other assets, the fair value may be determined by reference to the market value of the assets given up or in the absence of market value, book value of the assets are considered.

Sometimes adjustments may have to be made in the purchase consideration in the light of one or more future events. When the additional payment is probable and can be reasonably estimated it is to be included in the calculation of purchase consideration.

Purchase method of accounting for mergers and acquisition.

Example: Let us consider the balance sheet of X Ltd. as on 31st March, 2006

Liabilities	$ ('000)	Assets	$ ('000)
Share Capital:		Land & Buildings	5,000
Equity Shares of $ 10each	7,500	Plant & Machinery	4,500
14% Preference Share of $ 100 each	2,500	Furniture	1,050
General Reserve	1,250	Investments	500
12% Debentures	4,000	Stock	2,300
Sundry creditors and other current laibilities	2,000	Debtors	2,400
		Cash and Bank Balance	1,500
	17,250		17,250

Other Information:

(*i*) Y Ltd. takes over X Ltd. on 10th April, 2006.

(*ii*) Debentureholders of X Ltd. are discharged by Y Ltd. at 10% premium by issuing 15% own debentures of Y Ltd.

(*iii*) 14% Preference Shareholders of X Ltd. are discharged at a premium of 20% by issuing

necessary number of 15% Preference Shares of Y Ltd. (Face value USD. 100 each).

(*iv*) Intrinsic value per share of X Ltd. is USD. 20 and that of Y Ltd. USD. 30. Y Ltd. will issue equity shares to satisfy the equity shareholders of X Ltd. on the basis of intrinsic value. However, the entry should be made at par value only. The nominal value of each equity share of Y Ltd. is USD. 10.

Required: Compute the purchase consideration.

Solution:

Computation of Purchase consideration	(USD. in '000)	Form
For Preference Shareholders of X Ltd.	3,000	30,000 15% preference Share in Y Ltd.
For equity shareholders of Y Ltd. (2/3 × 750,000) × USD. 10	5,000	500,000 equity shares of Y Ltd. of USD. 10 each
Total Purchase consideration	8,000	

Note: Consideration for debenture holders should not be included above. Such debentures will be taken over by Y Ltd. and then discharged.

4.2 METHODS OF ACCOUNTING FOR AMALGAMATIONS

There are two main methods of accounting for amalgamation:

(*a*) The pooling of interests method, and

(*b*) The purchase method.

The first method is used in case of amalgamation in the nature of merger and the second method is used in case of amalgamation in the nature of purchase. Under pooling of interests method, the assets, liabilities and reserves of the transferor company will be taken over by transferee company at existing carrying amounts unless any adjustment is required due to different accounting policies followed by these companies. As a result the difference between the amount recorded as share capital issued (plus any additional consideration in the form of cash or other assets) and the amount of share capital of transferor company should be adjusted in reserves.

Under purchase method, the assets and liabilities of the transferor company should be incorporated at their existing carrying amounts or the purchase consideration should be allocated to individual identifiable assets and liabilities on the basis of their fair values at the date of amalgamation. But no reserves, other than statutory reserves, of the transferor company should be incorporated in the financial statements of transferee company. Statutory reserves of the transferor company should be incorporated in the balance sheet of transferee company by way of the following journal entry.

Amalgamation Adjustment A/c Dr.

To Statutory Reserves Cr

When the above statutory reserves will no longer be required to be maintained by transferee company, such reserves will be eliminated by reversing the above entry.

In purchase method any excess of the amount of purchase consideration over the value of the net assets of the transferor company acquired by the transferee company should be recognised as goodwill in the financial statement of the transferee company. Any short fall should be shown as capital reserve. Goodwill should be amortised over period of five years unless a somewhat longer period can be justified.

Example: Consider the following balance sheets of X Ltd. and Y Ltd.

Balance Sheet as on 31st March, 2006

LIABILITIES	X Ltd	Y Ltd	Assets	X Ltd	Y Ltd
	USD '000	USD '000		USD '000	USD '000
Equity Share Capital ($.10each)	5,000	3,000	Land & Building	2,500	1,550
14% Preference Share Capital ($. 100 each)	2,200	1,700	Plant & Machinery	3,250	1,700
General Reserve	500	250	Furniture $ Fittings	575	350
Export Profit Reserve	300	200	Investments	700	500
Investment Allowance Reserve		100	Stock	1,250	950
Profit & Loss a/c	750	500	Debtors	900	1,030
13% Debentures ($. 100 each)	500	350	Cash & bank	725	520
Trade creditors	450	350			
Other current liabilities	200	150			
	9,900	6,600		9,900	6,600

X Ltd. takes over Y Ltd. on 1st April, 2006. X Ltd. discharges the purchase consideration as below:

(*i*) Issued 350,000 equity shares of $. 10 each at par to the equity shareholders of Y Ltd.

(*ii*) Issued 15% preference shares of $. 100 each to discharge the preference shareholders of Y Ltd. at 10% premium.

The debentures of Y Ltd. will be converted into equivalent number of debentures of X Ltd. The statutory reserves of Y Ltd. are to be maintained for 2 more years.

Show the balance sheet of X Ltd. after amalgamation on the assumption that:

(*a*) The amalgamation is in the nature of merger.

(*b*) The amalgamation is in the nature of purchase.

Solution

Amalgamation in the nature of merger:

Balance Sheet of X Ltd.

Liabilities	$.'000	Assets	$.'000
Equity Share Capital ($. 100 each)	8,500	Land & Building	4,050
15% Preference Share Capital ($.100)	1,870	Plant & Machinery	4,950
14% Preference Share Capital ($.100)	2,200	Furniture & Fittings	925
General Reserve	80*	Investments	1,200
Export Profit Reserve	5,00	Stock	2,200
Investment Allowance Reserve	100	Debtors	1,930
Profit & Loss A/c 12,50	1,250	Cash & Bank	1,245
13% Debentures (Rs. 100 each) 8,50	850		
Trade Creditors	800		
Other current liabilities	350		
	16,500		16,500

**As per para 7.4* above, the difference between the amount recorded as share capital issued and the amount of share capital of transferor company should be adjusted in reserves. Thus,

General Reserve = $. '000 [750 – (5,370 – 4,700)] = $. ('000) 80.

(b) Amalgamation in the nature of purchase :

Balance Sheet of X Ltd.

Liabilities	$' 000	Assets	$' 000
Equity share Capital (Rs. 10)	8,500	Land & Buildings	4,050
15% Preference Share Capital ($. 100)	1,870	Plant & Machinery	4,950
14% Preference Share Capital ($.100)	2,200	Furniture & Fittings	925
General Reserve	500	Investments	1,200
Capital Reserve (working)	380	Stock	2,200

Profit & Loss A/c	750	Debtors	1,930
Export Profit Reserve	500	Cash & Bank	1,245
Investment Allowance Reserve	100	Amalgamation	300
13% Debentures ($. 100 each)	850		
Trade Creditors	800		
Other Current Liabilities	350		
	168,000		168,000

Workings: Capital Reserve arising on Amalgamation:

(A) Net Assets taken over:	USD'000	USD'000
Sundry Assets		6,600
Less: 13% debentures	350	
Trade creditors	350	
Other current liabilities	150	
		850
		5,750
(B) Purchase consideration :		
To Equity Shareholders of Y Ltd		3,500
To Preference Shareholders of Y Ltd.		1,870
		53,70
(C) Capital Reserve (A – B)		380

Illustration 1

S. Ltd. is absorbed by P. Ltd. The balance sheet of S. Ltd. is as under:

Balance Sheet

Share Capital:	$		$
2,000 7% Preference shares of $. 100 each (fully paid-up)	200,000	Sundry Assets	1,300,000
5,000 Equity shares of $. 100 each (fully paid-up)	5,00,000		

Reserves	300,000		
6% Debentures	2,00,000		
Trade creditors	1,00,000		
	1,300,000		1,300,000

P. Ltd. has agreed:

(*i*) To issue 9% Preference shares of $. 100 each, in the ratio of 3 shares of P. Ltd. for 4 preference shares in S. Ltd.

(*ii*) To issue to the debenture-holders in S. Ltd. 8% Mortgage Debentures∗ at $. 96 in lieu of 6%

Debentures in S. Ltd. which are to be redeemed at a premium of 20%;

(*iii*) To pay $. 20 per share in cash and to issue six equity shares of $. 100 each (market value $. 125) in lieu of every five shares held in S. Ltd.; and

(*iv*) To assume the liability to trade creditors.

Solution:

The purchase consideration will be

		$.	Form
Preference shareholders:	2,000 × 3/4 × 100	150,000	9% Pref. Shares
Equity shareholders :	5,000 × 20	1,00,000	Cash
	5,000 × 6/5 × 125	7,50,000	Equity Shares
		10,00,000	

Supposing the total number of fractions arising on exchange aggregate to 20 shares (equivalent to equity shares in P. Ltd.) each will have to be paid for them @ USD. 125 per

share; the remaining amount will be settled by the issue of equity shares. Alternatively, fraction certificates are issued; these are converted into shares on presentation - the holder of the fraction certificates must buy more such certificates or sell those held by him.

Test questions:

Make a clear difference between pooling and purchase methods of accounting for business combination.

UNIT 5

ACCOUNTING FOR FOREIGN EXCHANGE TRANSACTIONS

INTRODUCTION

The foreign subsidiaries of multinational corporations normally keep their accounting records and prepare their financial statements in the currency of the country in which they are located. They do this because it would be too inconvenient to transact business in anything other than the local currency and too impractical to record these transactions in accounting records using another country's currency. As a result, the individual financial statements of a multinational's foreign subsidiaries are expressed in many different currencies. Yet in order for worldwide consolidated financial statement to be prepared, the subsidiaries' financial statements must all be expressed in a single currency. Therefore, whenever multinational corporations prepare their consolidated financial statements, the financial statements from individual foreign subsidiaries must be translated from the currency of the foreign country into the currency of the country where the multinational is headquartered. Foreign currency translation is accomplished using exchange rates.

OBJECTIVES

After studying this unit, you should be able to:

1. List and explain the reasons for exchange rate changes.

2. State the steps taken in the translation of financial statements as contained in Financial Accounting Standard

3. Familiarize yourself with the impact of foreign exchange rates changes.

5.1 FOREIGN EXCHANGE CONCEPTS AND DEFINITIONS

Foreign business activity corporations have expanded rapidly over time. The effect of international branch and subsidiary operations on global companies' operating results is sizeable. Currencies provide a standard of value, a medium of exchange, and a unit of measure for economic transactions. Currencies of different countries perform the first two functions with varying degrees of efficiency, but essentially all currencies provide a unit of measure for the economic activities and resources of their respective countries. For transactions to be included in financial records, they must be measured in a currency. Typically, the currency in which a transaction is recorded and the currency needed to settle the transaction are the same. For example, a Chicago pizza shop buys all its produce and other inputs and pays all of its employees and other bills using U.S. dollars. The pizza shop collects dollars from its customers. If a receivable or payable arises, it will require receiving or spending dollars for settlement. A receivable or payable is denominated in a currency when it must be paid in that currency. A receivable or payable is measured in a currency when it is recorded in the financial records in that currency. In this example, the pizza shop's receivables and payables are denominated and measured in the same currency, the U.S. dollar. In the case of transactions between business entities of different countries, the amounts receivable and payable are ordinarily denominated in the local currency of either the buying entity or the selling entity.

For example, if a U.S. firm sells merchandise to a British firm, the transaction amount will be denominated (or paid) in either U.S. dollars or British pounds, even though the U.S. firm will measure and record its account receivable and sales in U.S. dollars and the British firm will measure and record its purchase and account payable in British pounds, regardless of the currency in which the transaction is denominated. If the transaction is denominated in British pounds, the U.S. firm has to determine how many U.S. dollars the transaction represents in

order to record it. If the transaction is denominated in U.S. dollars, the British firm has to determine how many British pounds the transaction represents. To measure transactions in their own currencies, businesses around the world rely on exchange rates negotiated on a continuous basis in world currency markets. Exchange rates are essentially prices for currencies expressed in units of other currencies.

Direct and Indirect Quotation of Exchange Rates

An exchange rate is the ratio between a unit of one currency and the amount of another currency for which that unit can be exchanged at a particular time. The exchange rate can be computed directly or indirectly. Assume that $1.60 can be exchanged for 1 British pound (£1). Direct quotation (U.S. dollar per one foreign currency unit):

$$\frac{\$1.60}{1} = \$1.60$$

Indirect quotation (the number of foreign currency units per U.S. dollar):

$$\frac{1}{\$1.60} = £0.625$$

:t quotation (from a U.S. viewp

5.2 EXCHANGE RATES

The major currencies of the world are traded in many places and in many ways. An exchange rate is the price of one currency relative to another. That is, how much of one currency it takes to buy so much of another currency. Exchange rates are not stable over time; they fluctuate just like the price of nearly everything else does. Exchange rates change for the following reasons:

1. Trade balance of payments surpluses or deficits. When a country exports more than it imports, it is said to run a trade balance of payments surplus. Surpluses cause the nation's currency to appreciate in value. The opposite condition-trade deficits, - causes a currency to command less of other nations' currencies.

2. Relative rates of inflation-currencies of countries with higher rates of inflation depreciate relative to the currencies of countries with lower levels of inflation. Generally speaking, inflation means that one is able to buy less and less of everything (including another country's currency) for a fixed amount of one's own currency.

3. Relative interest rates-whenever one nation has higher interest rates relative to other nations, its currency appreciates in value.

4. Political factors and government intervention. For international transactions, the currencies of countries considered politically stable tend to be favoured over the currencies of unstable countries. Governments also buy and sell currencies when they want to change exchange rates.

The entire task of foreign currency translation can be understood as determining the correct exchange rate to be used in converting each financial statement like item from the foreign currency to the headquarters country's currency. The translation adjustment is an inherent result of this process, in which balance sheet and income statement items are translated at different rates.

Financial Accounting Standards (FAS 52) establishes these steps:

> **Determine the functional currency.** The functional currency is defined as the currency of the primary economic environment in which the entity operates. Normally, that is the currency in which the majority of the subsidiary's business activities are transacted. The functional currency is not necessarily the home currency or the currency in which the subsidiary keeps its books.
>
> Determine whether the functional currency of the subsidiary is also its home currency.
>
> If the functional currency is the home currency, the current method is used. The current method translates all assets and liabilities at the current spot rate at the date of translation. Equity items, other than retained earnings are translated at the spot rates in effect on each

Related transaction date (specific identification). Retained earnings are translated at the weighted-average rate for the relevant year, with the exception of any components that are identifiable with specific dates, in which case the spot rates for those dates are used. Income statement items are translated at the average rate for the period, except where specific identification is practicable.

If the functional currency of the subsidiary is not its home currency, the temporal (historical) method is used. Under this method, nonmonetary balance sheet accounts and related income statement accounts are re-measured using historical exchange rates.

Under FAS 52, the temporal method is also used when the subsidiary operates in a highly inflationary environment. Companies reporting under International Financial Reporting Standards (IFRS) treat this differently by re-measuring the financial statements at the current balance sheet rate in order to present current purchasing power. GAAP, on the other hand, does not generally permit inflation-adjusted financial statements. Instead, it requires the use of a more stable currency as the functional currency.

5.3 DETERMINING EXCHANGE RATE(S)

There are many ways that exchange rates can be determined (Floating, Fixed, and Multiple Exchange Rates)

Exchange rates may be fixed by a governmental unit or may be allowed to fluctuate (float) with changes in the currency markets. Official, or fixed, exchange rates are set by a government and do not change as a result of changes in world currency markets. Free, or floating, exchange rates are those that reflect fluctuating market prices for a currency based on supply and demand and other factors in the world currency markets.

5.4 FLOATING EXCHANGE RATES

Theoretically, a currency's value should reflect its buying power in world markets. For example, an increase in a country's inflation rate indicates that its currency's purchasing

power is decreasing. The currency's value should fall in relation to other currencies. The technical term for this movement in currency value is weakening. A currency falls, or weakens, relative to another currency if it takes more of the weakening currency to purchase one unit of the other currency.

A large trade surplus (when the amount of exports exceeds imports) usually results in an increased demand for a country's currency because many of those export sales must be paid in the exporting country's currency. The exporting country's currency becomes more valuable relative to the importing countries' currencies, or it strengthens. A currency strengthens relative to another currency if it takes fewer units of the strengthening currency to purchase one unit of the other currency. A large trade deficit (when the amount of imports exceeds exports) should lead to a decrease, or weakening, of the currency's value. Although inflation and net trade position (trade surplus or trade deficit) are common causes of changes in floating exchange rates, other factors have occasionally been more influential. Interest rate differences across countries influence supply and demand for a country's currency because many investors buy securities in the international securities markets. Speculative trading to take advantage of currency movements also affects exchange rates. To reduce its trade deficit, the U.S. government has occasionally asked other countries (Taiwan and South Korea, for example) to let their currencies strengthen against the U.S. dollar. A decline in value of the dollar in relation to other major currencies should increase the price of foreign products in the United States and lead to a reduction of imports to the United States. Similarly, U.S. goods can be sold in international markets for fewer foreign currency units when the dollar weakens against those currencies. Even so, a weakening U.S. dollar has often done little to abate U.S. consumers' demand for imported products, and changes in the exchange rates may have little effect on the trade deficit. Other factors that may affect a country's trade balance include interest rates and tax rates. A mathematical example of strengthening and weakening of a currency relative to another currency follows. Initially, assume that one British pound can be purchased for $1.50. If the quote is indirect, $1 can be purchased for 0.6667 pounds. If the dollar weakens relative to the pound, each pound is more expensive in dollar terms. If the dollar weakens by 10 percent, each pound will now

cost $1.65. If the dollar weakens by 10 percent, it takes fewer pounds to buy $1, so now $1 can be purchased for 0.6061 pounds. If the dollar strengthens relative to the pound, each pound is less expensive in dollar terms. If the dollar strengthens by 10 percent, each pound will now cost $1.35. If the quote is indirect, $1 can now be purchased for 0.7407 pounds.

5.5 FIXED AND MULTIPLE EXCHANGE RATES

When exchange rates are fixed, the issuing government is able to set (fix) different rates for different kinds of transactions. For example, it may set a preferential rate for imports (or certain kinds of imports) and penalty rates for exports (or certain kinds of exports) in order to promote the economic objectives of the country. Such rates are referred to as multiple exchange rates.

A question may arise as to which exchange rate should be used to translate the financial statements of a foreign subsidiary given that exchange rate changes. One possibility is the exchange rate at the balance sheet date. Accountants often refer to this as the current or year-end exchange rate. However, translating all financial statement items at the rate existing at the balance sheet date is incompatible with historical cost.

Suppose a US parent company invest $30,000 in a foreign subsidiary and the subsidiary converts the money to its local currency when the exchange rate is 1LC (local currency) = $1.25. The foreign subsidiary takes its LC2 4,000 (i.e $30,000/1.25) and buys land. On a historical cost basis, the land has a value of LC2 4,000 or $30,000. If by year end the exchange rate changes to 1LC=$1.50 and is used to translate the LC 24,000 piece of land, it will appear on the consolidated US dollar financial statements at $36,000 (i.e LC2 4,000 X $1.50). The piece of land appears to have magically increased in value.

The $1.25 equal to 1LC which was the exchange rate when the transaction was first recorded is what is referred to, by the accountants as the historical exchange rate. This way, the land would always appear on the consolidated balance sheet at $30,000.

Unfortunately, another problem arises when historical exchange rates are used. Since the various assets are acquired at different times, different exchange rates have to be used to

translate them. When this happens, the translated balance sheet no longer balances. What to do with the difference between debits and credits is a highly controversial subject among accounts. The amount of the imbalance arises mechanically as a result of the translation process and does not fit the definition of asset, liability or owners' equity. Yet, it has to go somewhere to preserve the accounting equation.

Let us take a simple example as follows

Let us assume that on January 1, US multinational forms a foreign subsidiary and converts $100,000 into the subsidiary's local currency (e.g ugx) at a time when the exchange rate is ugx1=$1.25. The initial investment, therefore, is ugx80,000. The subsidiary opening balance sheet would be;

Subsidiary

Balance sheet as at 1st January, 2011

Cash ugx80,000 X (ugx1=$1.25) = $100,000

Financed by:

Owners' equity ugx80,000 X (ugx1=$1.25) = $100,000

Now assume that on February 1, when the exchange rate is ugx1= $1.30, foreign subsidiary buys ugx40,000 worth of inventory. On February 28, when the exchange rate is ugx1=$1.40, subsidiary buys a fixed asset for ugx40,000. The March 1 balance sheet will look like this.

Subsidiary

Balance sheet as at 1st March, 2011

		Ugx	$
Inventory	Ugx 40,000	(Ugx1=$1.30)	52,000

Fixed Asset	Ugx40,000	(Ugx1=$1.40)	56,000
		Ugx 80,000	108,000
Financed by: Owners' equity	Ugx80,000	(Ugx1=$1.25)	100,000
		80,000	100,000

While the balance sheet before translation (in local currency) balances, it does not balance after translation into US dollars. In the translated balance sheet, debits exceed credit by $8,000. What to do with the nonexistent credit is a good question, and accountants disagree on the answer.

International Accounting Standards

IFRS [3] addresses how to include foreign currency transactions and foreign operations in the financial statements. Like GAAP, IFRS requires that transactions be recorded initially at the rate of exchange at the date of the transaction. At each subsequent balance sheet date, foreign currency monetary amounts (such as foreign currency–denominated accounts receivables and payables) should be marked to the spot rate at the balance sheet date. Again, similar to GAAP, gains and losses from differences between the initial amount recorded and the year-end value for these monetary assets and liabilities are included in current year income.

Self Assessment Exercise

What is the importance of translating foreign currency?

5.6 Conclusion

Preserving the historical cost basis of accounting by translating foreign financial statements at different historical exchange rates introduces a dangling debit or credit whose nature is difficult to define. That problem can be solved by translating financial statements using a

single exchange rate, but the procedure is inconsistent with the historical cost basis of accounting. Either choice involves some undesirable side effects.

5.7 Summary

In this unit, we discussed foreign currency translation. Basically, we defined exchange rate and state the reasons why exchange rates changes. We also looked at the steps taken in carrying out translation as contained in financial accounting standards. And finally, we tried discussing which exchange rate should be used to translate the financial statements of a foreign subsidiary.

5.8 FOREIGN CURRENCY TRANSLATION METHODS

1. **Temporal Method**
2. **Current Rate Method**

The study further extends deeper on the methods of foreign currency translations.

After studying this unit, you should be able to:

Discuss what it means to translate a financial statement item at the historical exchange rate.
Discuss what it means to translate items in the financial statement at the current exchange rate.

5.8.1 TEMPORAL METHOD

Before statement 52 of FAS on foreign currency translation issued by the Financial Accounting Standards Board (FASB) IN 1981, US multinational corporations translated the financial statements of their foreign subsidiaries under the terms of statement 8 issued by the FASB in 1975. Statement 8 required the use of what is called temporal method of foreign currency translation. A mixture of different historical exchange rates and the current exchange rate are used to translate the items on the subsidiary's balance sheet and income statement. The resulting "dangling debit or credit" is treated as a loss or gain on the consolidated income statement. During the years that statement 8 was in effect, exchange rates were highly volatile, and because the translation imbalance was required to increase or decrease reported income or loss, corporations experienced more volatility in their reported

earnings than management desired. A volatile earnings pattern normally indicates riskiness, yet management alleged that translation gains and losses were on paper only-that they had little or no direct effect on actual cash flows. A large number of accountants cried 'foul' and it is fair to say that statement 8 was probably the most unpopular statement ever issued by the FASB. For this reason statement 8 was replaced by statement 52.

Illustration of Temporal Method

Assume that the following trial balance, expressed in local currency (Ugx), is received from a foreign subsidiary. The year-end exchange rate is Ugx 1=$1.40 and the average exchange rate for the year is Ugx 1=$1.20. Under the temporal method, the trial balance is translated as follows:

1. Inventory and cost of goods sold, at the exchange rate when the inventory was purchased. Assume this is Ugx 1=$1.25.
2. Fixed assets and depreciation expense, at the exchange rate when the fixed assets were purchased. Assume this is Ugx 1=$0.90.
3. Other balance sheet items, the year-end exchange rate (i.e Ugx 1=$1.40).
4. Revenues and expenses that are incurred evenly throughout the year (sales and other expenses) at the average exchange rate (Ugx 1=$1.20).
5. Beginning owners' equity in dollars equals last year's ending owners' equity (translated) in dollars. Assume this is $81,000.
6. A "translation" gain or loss is created to balance the dollar dominated trial balance. Thus, the temporal method translation

	UGX		Exchange Rate	DOLLARS	
	Debit	Credit		Debit	Credit
Cash	15,000		(ugx=$1.40)	21,000	
Inventory	70,000		(ugx =$1.25)	87,500	
Fixed assets	35,000		(ugx =$0.90)	31,500	
Payables		30,000	(ugx =$1.40)		42,000
Owners' equity		70,000			81,000

(beginning)					
Sales		200,000	(ugx =$1.20)		240,000
Cost of goods sold	120,000		(ugx =$1.25)	150,000	
Depreciation exp.	5,000		(ugx =$0.90)	4,500	
Other expenses	55,000		(ugx =$1.20)	66,000	
Translation loss	-	-		2,500	
Total	300,000	300,000		363,000	363,000

Self Assessment Exercise

Solve the question in the illustration without looking at the solution and compare your result to the solution in the illustration.

5.8.2 Modified Current Rate Method

Under the provisions of statement 52, a foreign subsidiary is classified as either

1. Self-sustaining and autonomous or
2. Integral to the activities of the parent company.

A self-sustaining, autonomous subsidiary is one that operates relatively independently from the parent company. Revenues and expenses respond mostly to local conditions, few of the subsidiary's cash flows impact the parent company cash flows, and there are few intra company transactions with the parent. The local (foreign) currency is said to be its 'functional' currency. The balance sheet for a self-sustaining subsidiary is translated at the year-end exchange rate and the income statement at the average for the year exchange rate. There is no effect on reported consolidated earnings from translating the financial statements of autonomous foreign subsidiaries. This is called modified current rate method which preserves the balance sheet and income statement financial ratios in the US dollars as in the local currency.

Table Illustration of Modified Current Rate Method

	UGX		Exchange Rate	Dollars	
	Debit	Credit		Debit	Credit
Cash	15,000		(Ugx 1=$1.40)	21,000	

Inventory	7 0,000		(Ugx 1=$1.40)	98,000	
Fixed Assets	35,000		(Ugx 1=$1.40)	49,000	
Payables		30,000	(Ugx 1=$1.40)		42,000
Owners' equity		70,000	To Balance		102,000
Sales		200,000	(Ugx 1=$1.20)		240,000
Cost of Goods Sold	120,000		(Ugx 1=$1.20)	144,000	
Depreciation exp.	5,000		(Ugx 1= Ugx 1.20)	6,000	
Other Expenses	55,000		(Ugx 1=$1.20)	66,000	
	300,000	300,000		384,000	384,000

Questions to digest at your own time

1. What does it mean to translate a financial statement item at the historical exchange rate?
2. What does it mean to translate an item at the current exchange rate?
3. List and explain the reasons for exchange rates changes.
4. State the steps taken in the translation of financial statements as contained in FAS 52.
5. Define the term derivative and provide examples of risks that derivative contracts are designed to reduce.
6. Explain the differences between forward contracts and futures contracts and the potential benefits and potential costs of each type of contract.
7. Explain the differences between options and swaps and the potential benefits and potential costs of each type of contract.
8. What does "Net Settlement" mean?
9. Distinguish between measurement and denomination in a particular currency.
10. Assume that one euro can be exchanged for 1.20 U.S. dollars. What is the exchange rate if the exchange rate is quoted directly? Indirectly?

11. What is the difference between official and floating foreign exchange rates? Does the United States have floating exchange rates?
12. What is a spot rate with respect to foreign currency transactions? Could a spot rate ever be a historical rate? Could a spot rate ever be a fixed exchange rate? Discuss.
13. Assume that a U.S. corporation imports electronic equipment from Japan in a transaction denominated in U.S. dollars. Is this transaction a foreign currency transaction? A foreign transaction? Explain the difference between these two concepts and their application here.
14. How are assets and liabilities denominated in foreign currency measured and recorded at the transaction date? At the balance sheet date?
15. Criticize the following statement: "Exchange losses arise from foreign import activities, and exchange gains arise from foreign export activities."
16. When are exchange gains and losses reflected in a business's financial statements?

    A U.S. corporation imported merchandise from a British company for £1,000 when the spot rate was $1.45. It issued financial statements when the current rate was $1.47, and it paid for the merchandise when the spot rate was $1.46. What amount of exchange gain or loss will be included in the U.S. corporation's income statements in the period of purchase and in the period of settlement?

REFERENCES/FURTHER READING

Benjamin, J. J., Grossman, S. And Wiggins, C. (1996), "The Impact of Foreign Currency Translation on Reporting during the Phase-in of SFAS No. 52". Journal of Accounting, Auditing, and Finance 1, no. 3, pp 174 –184.

Choi, F. D. S., Frost, C. A. And Meek, G. K. (1999), "Foreign Currency Translation." In International Accounting , Upper Saddle River: Prentice Hall.

Harris, T. S. (1997), "Foreign Currency Transactions and Translation." In International and Finance Handbook, New York: John Wiley & Sons

5.9 IFRS 13 FAIR VALUE MEASUREMENT (FVM)

FVM OBJECTIVES

To define fair value

To set out in a single IFRS a framework for measuring fair values,

Defining the disclosures necessary to understand how the fair value measurements were derived

Applies to IFRSs that require or permit fair value measurements or disclosures about fair value measurements (except for IFRS2, IAS2, IAS17 and IAS36)

IFRS13 does not mandate when fair value measurements should be used – this is dealt within other IFRSs**.**

Mixed measurement model source of measurement bases: IFRS

5.10 INTRODUCTION

Fair value is the price that would be received to sell an asset or paid to transfer a liability (exit price) in an orderly transaction (not a forced sale) between market participants (market-based view) at the measurement date (current price). Fair value is a market-based measurement (it is not an entity-specific measurement)

Consequently, the entity's intention to hold an asset or to settle or otherwise fulfil a liability is not relevant when measuring fair value

ASSET TYPE	MEASUREMENT AT INITIAL RECOGNITION	MODEL BASED ON FAIR VALUE	BASIS OF IMPAIRMENT TEST
IFRS 9 *Financial Instruments*	Fair value	For specified financial assets and for particular business models: fair value	
IAS 16 *Property, Plant and Equipment*	Purchase costs + construction costs + costs to bring to the location and condition necessary to be capable of operating in the manner intended by management.	Accounting policy choice: revaluation model	Compare carrying amount to recoverable amount. Recoverable amount is greater of value in use and fair value less disposal costs (IAS 36)
IAS 38 *Intangible Assets*	Purchase costs + development costs + costs to bring to the location and condition necessary to be capable of operating as intended by management	Accounting policy choice: revaluation model	
IAS 40 *Investment Property*	Cost including transaction costs	Accounting policy choice: fair value	
IAS 41 *Agriculture*	Fair value less costs to sell	Fair value less costs to sell	

When measuring fair value use assumptions that market participants would use when pricing the asset or liability under current market conditions, including assumptions about risk.

Characteristics of a particular asset or liability that a market participant would take into account when pricing the item at the measurement date, include:–age, condition and location of the asset–restrictions on the sale or use.

Characteristics of fair value

- A market value (not entity-specific value)
- An exit value
- Reflects all changes that market participants factor into pricing at the measurement date
- A clear measurement objective
- Requires judgement to measure (especially Level 3 measurements)
- Determine the appropriate valuation technique/s and inputs that market participants would use when pricing the asset or liability.

Key definition

Fair value = 'The price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date'.-

This is sometimes referred to as an '**Exit Price'**.

Think of Hypothetical but orderly transaction.

The key in IFRS13 is that fair value is a market-based measurement, not an entity-specific measurement.

When measuring fair value, an entity uses the assumptions that market participants would use when pricing the asset or liability under current market conditions, including assumptions about risk.

FVM – Key Considerations

An entity should take into account the characteristics of the asset or liability if market participants would take those characteristics into account when pricing the asset or liability.

Such characteristics include:

- The condition
- Location of the asset

- Restrictions, if any, on the sale or use of the asset

A key point is that, if they are to affect the fair value measurement, any restrictions must apply to the asset itself. Restrictions that apply to the entity that holds the asset are not taken into account, because a potential purchaser would not be subject to those restrictions.

5.11 FAIR VALUE THE MARKET

A fair value measurement assumes that the transaction takes place either:

- In the principal market for the asset or liability; or
- In the absence of a principal market (i.e all potential markets have the same volume or level of activity for the item, or the volume or level of activity can not be established), in the most advantageous market for the asset or liability.
  - The **principal market** is the market with the greatest volume and level of activity for that asset or liability
  - The **most advantageous market** is the market in which the entity could achieve the most beneficial price
  - Transaction and Transportation costs are considered in determining the most advantages/principal market
  - **Transaction costs** in the markets elected are accounted for in accordance with other applicable IFRSs and do not form part of fair value calculation

5.12 FAIR VALUE MARKET – THE PRICE

The price in FVM is an exit price. Sometimes there could be a difference between transaction price (entry price) and exit price.

The accounting for the difference is not within the scope of IFRS13, instead the relevant standard will prescribe the treatment for the difference.

This difference is commonly known as Day One Gain or Loss

Market participants in FVM

An entity should measure the fair value of an asset or a liability using the assumptions that market participants would use when pricing the asset or liability

Market participants are:

- Independent of each other and knowledgeable about the asset or liability
- Able and willing to enter into a transaction for the asset or liability

- A fair value measurement assumes that the asset or liability is exchanged in an orderly transaction under current market conditions at the measurement date
- An 'orderly transaction' means that it is not a forced transaction (liquidation or distress sale)
- In Orderly Transaction – market participants will usually perform various procedures (e.g. due diligence) within areas on able period allowed by the seller.
- The seller itself is a market participant, and in order to achieve an orderly transaction, it must allow for marketing activities that are usual and customary for transactions involving such item.

5.13 Highest and best use (HBU)

An entity's current use of an asset is generally taken to be its highest and best use, unless market or other factors suggest that a different use of that asset by market participants would maximize its value.

If such factors exist, management is required to consider all relevant information in determining whether the highest and best use of an asset is different from its current use at the measurement date

A fair value measurement of a non-financial asset takes into account a market participant's ability to generate economic benefits by using the asset in its highest and best use or by selling it to another market participant that would use the asset in its highest and best use.

The highest and best use takes into account the use of the asset that is:

- Physically possible
- Legally permissible
- Financially feasible

Highest and best use is always considered when measuring fair value, even if the entity intends a different use.

HBU determination can be either

- On a stand-alone basis
- In a combination with other assets
    - Assumed the complimentary assets are available to market participants

5.14 Fair value hierarchy

1. Level 1 – highest priority is given to quoted prices in active markets for identical assets or liabilities
2. Level 2 – observable inputs not included in level 1 (e.g. quoted prices for similar assets or liabilities in active markets, quoted prices for identical or similar assets or liabilities in markets that are not active, Finished goods inventory at a retail outlet, Building held and used..)
3. Level 3 – unobservable inputs developed using best information available (e.g. entity's own)

– Valuation techniques used to measure fair value should maximize the use of relevant observable inputs and minimise the use of unobservable inputs
– Observable inputs – developed using market data such as publicly available information about actual events or transactions
– Unobservable inputs – market data not available and developed using best information available about assumptions that market participants would use.

- Bid prices apply to long positions and ask prices apply to short positions (paragraph 70 of IFRS 13). However,
    - IFRS 13 does not preclude the use of mid-market pricing or other pricing conventions that are used by market participants as apractical expedient for fair value measurement within abid-asks pread (paragraph 71 of IFRS 13).
    - The entity uses the price with in the bid-ask spread that is most representative of fair value in the circumstances (paragraph 70 of IFRS 13).

5.15 IFRS 13 describes valuation techniques:

i. **Market approach** – uses prices generated by market transactions.
ii. **Income approach** – converts future amounts to a single (present value) amount
iii. **Cost approach** – determines the value that reflects current replacement.

Fair value of a non-financial asset for testing your understanding: example one

On 31 December 2000 what is the fair value of your land rights (i.e. excluding the factory building)? Choose 1 of:

1) $0; 2) $10 million; 3) $20 million; 4) $30 million; 5) $70 million; 6) $80 million; 7) $100; million; or 8) another amount

On 31 December 2000 what is the fair value of your factory building(i.e. excluding the land rights)?

Choose 1 of:

1) $0; 2) $10 million; 3) $20 million; 4) $30 million; 5) $70 million; 6) $80 million; 7) $100; million; or 8) another amount

Your factory is built on Plot 900 in a recently developed industrial development zone on the outskirts of Addis Ababa where the land that is divided into one hundred two acre plots that before their further development were essentially homogenous. Factories, like yours, are the highest and best use for the land rights.

On 31 December 2000 two of the plots adjoining your plot were sold (i.e sale of the land rights and the buildings, if any, constructed there on):

- Plot 901 sold for $30million: land rights with a similar factory of the same age, same condition and same floor area as yours.
- Plot 899 sold for $10million because it is undeveloped (yet to be built on).

The facts are the same as Example1, except that in this example (fifteen years later), on 31December 2015:

- High-rise commercial development is now the highest and best use for your land rights because the rapidly expanding financial district of Addis Ababa has grown to the boundary of plots 899,900 and 901.
- Consequently, on 31 December 2015 Plots 899 and 901 each sold for $100million.

On 31 December 2015 what is the fair value of your land rights (ie excluding the factory building)?

Choose1of:

1) $0 ;2) $10 million; 3) $20 million; 4) $30 million; 5) $70 million; 6) $80 million; 7) $100; million; or 8) another amount

On 31 December 2015 what is the fair value of your factory building (i.e excluding the land rights)?

Choose1of:

1) $0; 2)$10 million; 3) $20 million; 4) $30 million; 5) $70 million; 6) $80 million; 7) $100; million; or 8) another amount

Does your estimate of the fair value of your factory building (i.e excluding the land rights) depend on which model you use for your land rights (cost model or revaluation model)?

Entity Apledges100,000 BP plc shares that it owns as collateral in a borrowing arrangement.

- Consequently, Entity A cannot sell its BP shares until it settles the borrowing.
- BP plc shares are issued without such a restriction and trade on both the London Stock Exchange and the New York Stock Exchange.

Is the restriction relevant to measuring the fair value of the BP shares held by Entity A?

Entity B acquires 100,000 MTN Zakhele shares the sale of which is restricted as follows:

- The share can not be traded for the next three years.
- For a further three-year period the shares can be sold only to those that qualify as being previously disadvantaged in accordance with MTN Zakhele's South African broad-based black economic empowerment (BEE) scheme.
- There after trading in the share is unrestricted.

Assume MTN Zakhele has no liabilities and its only assets are its MTN shares (which are unrestricted and trade actively on the Johannesburg Stock Exchange).

5.16 FVM – KEY CONSIDERATIONS

A local government contributes land in another wise developed residential area to a commercial entity, which is constructing a hotel on the land. The local government specifies that a hotel must continue to be located on the land, as long as the commercial entity owns the land and hotel.

Highest and Best Use (HBU) - Example

Suppose a software developer came to market with a web browser. Assume also that a competitor came to market with a competing web browser.

The first developer may choose to buy the intellectual capital of the second developer and then withdraw the second browser from the market in order to support its own web browser.

FVM – The Price

Company A is engaged in the construction and sell of office buildings. The company just finished marketing 4 out of 5 floors of an office building each of which has been sold for 1 million Birr. The last floor is purchased by company B (subsidiary of company of A) for 800,000 Birr. Assume that the fair value of each floor is 1 million Birr.

Disclosures – FVM

- Valuation techniques and inputs used to develop fair value measurements (including the level of the hierarchy within which the fair value measurements are categorised)
- Effect of measurements on profit/loss or OCI for the reporting period for recurring fair value measurements
- Additional disclosure requirements, particularly for fair value measurements based on Level 2 and Level 3 inputs

UNIT 6

FINANCIAL STATEMENTS ANALYSIS; ACCOUNTING RATIOS

ISSUES WITH MULTINATIONAL CORPORATIONS.

INTERNATIONAL FINANCIAL STATEMENT ANALYSIS

6.0 INTRODUCTION

ANALYSIS OF FINANCIAL STATEMENTS

- MEANING OF FINANCIAL STATEMENT
- NATURE OF FINANCIAL STATEMENT
- ESSENTIAL QUALITIES OF FINANCIAL STATEMENTSTATEMENT
- LIMITATION OF FINANCIAL STATEMENT
- FINANCIAL STATEMENT ANALYSIS
- TOOLS & TECHNIQUES OF ANALYSIS
- TYPES OF COMPARISON
- INTERPRETATION

The nature of financial statement

The data exhibited by financial statements are affected by are affected by

Recorded facts
Accounting Concepts, Conventions & Principles
Personal Judgment

Accounting principles

Accounting concepts	Accounting Conventions
Entity concept	Disclosure
Accounting period concept	Materiality
Money measurement concept	Consistency
Cost concept	Conservatism
Cost attach concept	
Dual aspect concept	
Accrual concept	
Periodic Matching of cost and	
Revenue Concept	
Realization Concept	
Verifiable Objective Evidence Concept	

ESSENTIAL QUALITIES OF FINANCIAL STATMENTS

Relevance

Understandability

Reliability and Accuracy

Comparability

Completeness

Timeliness

LIMITATIONS OF FINANCIAL STATEMENTS

Lack of Precision

Lack of Exactness

Incomplete Information

Interim Reports

Hiding of Real Position or Window Dressing

Lack of Comparability

Historical Costs

Analysis of Financial Statements

Financial Statement Analysis means - "Analysis, comparisons and interpretation of Financial data to achieve the desired result"

Tools of Financial Statement Analysis

- Comparative statements
- Common size statements
- Trend analysis
- Ratio analysis
- Fund flow statement
- Cash flow statement

Types of financial analysis

- Intra-firm comparison
- Inter firm comparison
- Industry average or standard analysis
- Horizontal analysis
- Vertical analysis

Interpretation

The Analysis is of no use without interpretation. The Company has to interpret the financial statement which it has analysed. The analysis is made to serve the following purposes.

- Profitability analysis
- Liquidity analysis
- Solvency analysis (to know the financial structure)

Interested parties in analysis of financial statements

- Management

Investors
Banks and financial institutions
Trade creditors
Government and their agencies
Employees
Customers public
Trade associations
Stock exchange
COMPARATIVE FINANCIAL STATEMENTS

Comparative Financial Statements is a statement of Financial Position of a business designed in such a way where a comparative study is undertaken of different accounting items, to measure the different accounting items, to measure the performance of a Business Activity.

Types of Comparison

There are 3 types of Comparison

Inter Firm Comparison
Intra Firm Comparison
Inter Period Comparison

Merits:

Indicate the direction of financial position
Reveal nature of trend
Identifying trouble spots

Disadvantages

Misleading picture, if consistency in accounting principle not followed
Constant change in price level tender accounting statement useless for comparison.
Inter firm comparison is useless, unless all the firms are of the same age, size and follow the same principles.

If there exists any Abnormal Period between 2 successive accounting period then it will prove to be a pointless analysis.

COMMON SIZE STATEMENTS

It is a statement in vertical form in which every item of the financial statement is reduced to a common base. This was introduced with a view to overcome the limitation of comparative statement.

Types of common size statements

Common size balance sheet

Common size income statement

Advantages of common size

It reveals Sources and Application of Funds in a nutshell which help in taking decision.

If common size statements of 2 or more years are compared it indicate the changing proportion of various components of Assets, proportion of various components of Assets, Liabilities, Cost, Net Sale & Profit.

When Inter Firm Comparison is made with the help of Common size statement it helps in doing corporate evaluation and Ranking.

Disadvantages of Common Size Statement

No Established Standard Proportion:

Common Size Statements are regarded as useless as there is no established standard proportion of an asset to the total asset or an item of expense to the net sales

Consistency Required

If Financial Statement of a Particular business organization are not prepared year after year on a consistent basis comparative study of common size consistent basis comparative study of common size statement will be misleading.

TREND ANALYSIS

Trend Analysis is a statement in vertical form where the earliest year is taken as base year and the value of all the items in the financial statements will be related to the base year in terms of % where value of each item in base year will be considered as 100. Trend % analysis move in one directions either upward or downward progression or regression.

Advantages

Trend % indicate the increase or decrease with the magnitude of change in % which is with the magnitude of change in which more effective than absolute data. Ex. If we say profit increases by $ 50,000/- it will be meaningless unless we find what % the profit has increased. Facilitate efficient comparative study of financial performance

Limitations:

It will give a misleading picture if consistency in accounting principle is not followed.
Constant change in price level render accounting statement useless for comparison.

During inflationary period the data over a period of time become incomparable, unless the absolute dollar data is adjusted.

There is always the danger of selecting the base year which may not be representative, normal & typical.

Trend % should be studied in relation with Absolute figure otherwise it gives misleading picture. For ex. No. of student where 2, the next year they increased to 4. Now trend student where % show 100% increase but absolutely we get clear picture than trend %.

Assuming you had just been recently hired as a financial analyst for a major Nigeria multinational corporation. And you are required to carry out analysis from a set of financial statements from a Japanese corporation which your company intended buying over because of its sustained growth and profitability. As the company comes so highly recommended, you assume it will be a routine exercise to generate the supporting members to back up the purchase decision. Assuming you discovered that the Japanese company is a financial disaster. Its debt to equity ratio is nearly twice as large as that of Nigeria firms. Contributing

to your worries is short-term debt nearly double that of Nigeria firms. In addition, the net income numbers are very low compared to what you expected for this growing firm. And you are wondering what could be wrong selecting such a company for acquisition. That is the essence of this unit, that a framework should be developed that uses information to analyze a foreign based corporation's financial position in the light of the environment in which it operates.

6.0 OBJECTIVES

After studying this unit, you should be able to:

1. Explain how cultural values influences accounting system.
2. Discuss the following accounting values

a. Professionalism versus statutory control

b. Uniformity versus flexibility

c. Conservatism versus optimism

d. Secrecy versus transparency

6.1 FINANCIAL ACCOUNTING REFLECTS THE ENVIRONMENT IT SERVES

The use of home country ratio analysis expectation for analyzing foreign financial statements is only effective if the foreign financial accounting system and the operating environment closely parallel that of the home country. Unfortunately, that is rarely the case. Each country's national financial accounting system evolved to serve the needs of its domestic environment and in particular, the needs of the users of accounting information in that country. Therefore, each country's national financial accounting and reporting requirements are different. The best way to properly analyze financial statements from another country is to understand the domestic accounting system and business practices in that country. Becoming familiar with each country's accounting and business practices is a monumental task. However, we have the necessary tools. We need to develop an approach, that is, a framework that can be use with any country.

Analysis of financial statements gives an insight reflection to various stakeholders who wishes to use that information for decision making. They may be internal or external.

TOOLS FOR ANALYZING FINANCIAL INFORMATION

The basis of financial analysis is a company's financial statements. Comparative analysis can be performed using common size horizontal and vertical analysis. Ratios represent a relationship between accounts. The analysis can be used to show trends and comparisons.

The Accounting Equation

Accounting Equation: A = L + OE. A=Assets, L=Liabilities, and OE = Owner's Equity

Accounting Equation: Assets = Capital and Liabilities

The accounting equation is one of the foundational accounting concepts. It lays out the concept of double entry accounting and provides a useful and easy tool for checking the accuracy of accounting entries. It also serves to illustrate the organization of one of the primary financial statements, the balance sheet.

FINANCIAL STATEMENT FOOTNOTES

Many novice users of financial statements tend to overlook financial statement footnotes. This can be a significant oversight because footnotes are an integral part of financial statement disclosure. Some important information that can be found in footnotes includes:

- Significant accounting policies,
- Additional information regarding the totals in financial statements,
- Disclosure of information not recognized in the financial statements, and
- Supplementary information required by IAS, GAAP, banking act and Capital market authority.

COMMON SIZE ANALYSIS

Common size analysis is comprised of horizontal and vertical analysis.

Horizontal Analysis

Horizontal analysis is also referred to as "trend analysis" as it shows the direction, speed, and extent of an item under study over a period of time. Horizontal analysis is often

accomplished by choosing a typical year, usually the first in the sequence, as the base year. The values for the base year are set as 100% then; subsequent years are divided by the base year. The result is a percentage value for each line item relative to the base year. An alternative format, particularly useful if looking at only two or three years, is calculated showing a year-over-year percentage (i.e., dividing the change from one year to the next by the earlier year.)

Horizontal analysis requires the analyst to examine why the numbers have moved the way they have. For example, the increase in revenues may be caused by inflation (price increases on same unit sales volume), or by business combinations giving you more sales outlets or square footage of retail space. Of course, the ideal would be more sales, in terms of units, from the same stores. Next, the analyst will need to examine if the other items have moved in proportion. For instance, you would be happy if the cost of goods sold was increasing but at a lesser rate than revenues. Similarly, you would be glad to see profits increasing at a faster rate than revenues. A couple of words of caution—you can't develop a meaningful change ratio if the base year number, the denominator, is zero or negative. You also should be cautious in your interpretation if a number is very small compared to another as the difference appears magnified (e.g., change from Ugx1 to Ugx100 gives you a percentage increase of 10,000 percent.)

Table 6.1: Statement of position Horizontal Analysis

	Uganda Limited Statement of financial position as at December 31				
	20X1		20X2		20X3
	Ugx	%	Ugx		Ugx
Cash	1,469,000	38.4%	2,032,500	21.0%	2,460,000
Accounts Receivable		4.2%		4.0%	9,750,000

	9,000,000		9,375,000		
Inventory	4,125,000	12.1%	4,625,000	13.5%	5,250,000
Total Current Assets	14,594,000	9.9%	16,032,500	8.9%	17,460,000
Equipment (net)	19,000,000	-3.3%	18,375,000	-4.8%	17,500,000
Property and Plant (net)	16,000,000	-3.9%	15,375,000	-4.1%	14,750,000
			Ugx		Ugx
Total Assets	49,594,000	0.4%	49,782,500	-0.1%	49,710,000
Accounts Payable	1,500,000	50.0%	2,250,000	11.1%	2,500,000
Current Portion of Bank Loan	2,500,000	0.0%	2,500,000	0.0%	2,500,000
Accruals	3,375,000	3.7%	3,500,000	7.1%	3,750,000
Total Current Liabilities	7,375,000	11.9%	8,250,000	6.1%	8,750,000
Bank Loan (6%)		-25.0%		-33.3%	5,000,000

	10,000,000		7,500,000		
Mortgage Bond (8%)	5,000,000	0.0%	5,000,000	0.0%	5,000,000
Total Current & Long Term Liabilities	22,375,000	-7.3%	20,750,000	-9.6%	18,750,000
Common Stock	9,587,500	0.0%	9,587,500	0.0%	9,587,500
Retained Earnings	17,631,500	10.3%	19,445,000	9.9%	21,372,500
Total Liabilities and Equity	49,594,000	0.4%	Ugx 49,782,500	-0.1%	Ugx 49,710,000

Statement of income horizontal analysis

Horizontal Analysis	Uganda Limited Statement of Income for the Year ended December 31,				
	20X1		20X2		20X3
	Ugx	%	Ugx	%	Ugx
Sales	41,250,000	12%	46,250,000	8%	50,000,000
Cost of goods Sold	(28,875,000)	12%	(32,375,000)	8%	(35,000,000)

Gross Profit	12,375,000	12%	13,875,000	8%	15,000,000
Selling, General and Admin. Expenses	(4,560,000)	14%	(5,205,000)	12%	(5,850,000)
Depreciation	(1,500,000)	0%	(1,500,000)	17%	(1,750,000)
Earnings Before Interest and Taxes	6,315,000	14%	7,170,000	3%	7,400,000
Interest	(1,275,000)	-12%	(1,125,000)	-13%	(975,000)
Earnings Before Taxes	5,040,000	20%	6,045,000	6%	6,425,000
Income Tax @ 40%	2,016,000	20%	2,418,000	6%	2,570,000
NET INCOME	3,024,000	12%	3,627,000	8%	3,855,000

Note: Do exercise on vertical analysis and ratios as guided by your module lecturer

Meek, G. K. and Fulkerson, C. L. (1998), "Analysts' Earnings Forecasts and the Value Relevance of 20-F Reconciliations from non-U.S. GAAP." Journal of International Financial Management & Accounting 9, no 1, pp 1 –15

Wild J. W., Subramanyam K.R., Hasley R. F., *Financial Statement Analysis* (2010) 9th Edition; TheMc-Graw Hill Higher Education.

6.4 RATIO ANALYSIS

INTRODUCTION

This lecture will review the accounting equation and basic financial statements used as sources for financial analysis. We will discuss and demonstrate the use of ratios.

Objectives of the Study

Upon completion of this lecture, students will be able to:

Describe the basic financial statements and their contents and explain how they relate to each other,

Find comparative industry financial data, and

Calculate commonly used ratios

Compare the firm ratios and industry ratios

TRADITIONAL CLASSIFICATION BALANCE SHEET RATIOS

- Current Ratio
- Quick Ratio / Liquid Ratio / Acid Test Ratio.
- Super Quick Ratio
- Stock to work Capital Ratio
- Capital Gearing Ratio
- Debt Equity Ratio
- Proprietary Ratio
- Long Term Borrowing : Total Asset
- Fixed Assets : Net Worth

REVENUE STATEMENT RATIOS

- Gross Profit Ratio
- Net Profit Ratio
- Operating Net Profit Ratio
- Operating Ratio
- Operating Expenses Ratio
- Stock Turnover Ratio
- Stock Holding Period

COMBINED RATIOS

- Return on Investment (ROI) or
- Return on Capital Employed (ROCE)
- Return on Proprietor / Shareholder fund
- Return on Equity shareholder fund
- Earning per share
- Dividend per share
- Dividend Payout Ratio
- Price Earning Ratio
- Interest Coverage Ratio

Combined ratios

- Debt: service coverage ratio
- Debit collection period
- Debtor Turnover Ratio
- Creditor Payment Period
- Creditor Turnover Ratio
- Preference dividend cover
- Equity dividend cover

BASED ON FUNCTIONS

SOLVENCY RATIO

Short Term Solvency

- Current ratio
- Quick ratio/liquid ratio/acid ratio
- Super quick ratio
- Stock: working capital ratio

Long Term Solvency / Leverage Ratio

- Capital gearing
- Debt: Equity ratio
- Proprietary ratio
- Long term borrowing: total Assets (1-Net Worth)/total Assets
- Fixed Asset: Net worth

ACTIVITY RATIO / TURNOVER RATIOS

- Stock Turn Over Ratio
- Stock Holding Period
- Debt Collection Period
- Debtor Turnover Ratio
- Creditor Payment Period
- Creditor Turnover Ratio

PROFITABILITY RATIO

In relation to sales

- Gross profit ratio
- Net profit ratio
- Operating net profit ratio
- Operating expenses ratio
- Operating ratio

In relation to capital employed

Return on Interest (ROI) or Return on Capital Employed (ROCE)

Return on Proprietor / Shareholder funds

Return on Equity Shareholder Fund

Earning per Share

Dividend per Share

Dividend Payout Ratio

Price Earning Ratio

COVERAGE RATIOS

Interest Coverage Ratio

Preference Dividend Cover

Equity Dividend Cover

Debt Service Coverage Ratio

Financial performance of the firm may be determined using various methods. The most common method for analyzing financial performance is Ratio Analysis. This is the means of resetting financial state modes in form of rations or percentages to enable companies to be made within a year (quantity basis), for a given period of time and within the industry.

They are various types of ratios which can be used for performance measurement and they can give the basis of financial planning and forecasting. It is normally assumed that the same trend will continue for sometime.

Ratios can be calculated from any pair of numbers. One number, the numerator, is divided by the other, the denominator. The numbers should have a meaningful relationship one to the other, generally a cause and effect relationship. Ratios are typically reported to two or three decimal places. Sometimes the ratio is stated as a proportion (i.e., current ratio or 1.46:1), as a multiple (i.e., total asset turnover 2.85X), or as a percentage (i.e., profit margin of 3.66%.) Some analytics require the use of ratios in their calculation but are stated in days (i.e., days sales in inventory of 20.03 days.) Other analytics require calculation of an absolute number (i.e., working capital of Ugx 153,755.)

There is no one universal set of financial statement ratios. Different analysts have different ratios they think are important in analysis. Their classifications are inconsistent and in some cases, even the methodology differs. This brings up the need to state the obvious. If you are comparing ratios you have calculated with those from another source or furnished by someone else, it is necessary to know what formula they used in calculating the ratio. Or, in other words, make sure you are comparing apples to apples. An example of this is the **acid test ratio**. Some analysts calculate this ratio as:

(Current assets – Inventory) / Current liabilities

Others will calculate it as only "quick assets":

(Cash + Cash equivalents + Marketable securities + Notes receivable + Accounts receivable) / Current liabilities

Included in the first will be items that may be illiquid like prepaid expenses and other current assets. They would be left out of the second formula. The result is two different numbers for the ratio called the acid test ratio.

A ratio by itself is meaningless and cannot be construed as good or bad. It only takes on meaning when measured against or compared with another number such as:

Prior periods,

Industry norms or benchmarks,

Budget or plan, or

Competitor's results

An analogy would be if someone simply said, "Sammy hit one home run." How would you react? Is this good or bad? If I tell you the individual named Sammy is Sammy Sosa and he hit three home runs in each of the last four games, then one doesn't sound so good. If I told you that Sammy is a rookie pitcher playing in his first major league game, you'd probably be more impressed.

Rule-of-thumb numbers exist for many commonly used ratios such as the current ratio and the acid test ratio. A current ratio is acceptable if it exceeds 2:1. The acid test ratio should be at least 1:1. Exercise caution when using these types of guidelines as they are broad, generalized averages. A current ratio of less than 2:1 might be very good in a basic industry with heavy capital investment and little in the way of current assets. Alternatively, a 4:1 current ratio might be considered poor in a high-tech business with high inventory obsolescence and high current liabilities.

Don't forget basic rules of math when calculating ratios. You cannot divide by zero. You cannot get a meaningful ratio when the numerator or denominator is a negative and the other number is positive.

Illustration Kisumu Limited

Statement of Income

For the year ended 31/12/20X2

	Ugx.000	Ugx.000
Sales		36,250
Cost of sales		21,750
Profit on disposal of asset	14,500	
		700
Gross profit		15,200
Wages & salaries	1,600	
Other cash expenses	3,600	
Depreciation	35,000	

Debenture interest	2,000	10,700
Profit before tax		4,500
Tax		11,500
Profit after tax		3,000
Proposed dividend		2,000
Retained profit for the year		11,000
Retained profit for previous year		4,000
Total profit		**15,000**

Kisumu Limited

Statement of Position as at:

	31/12/20X2	31/12/20X1
	(Ugx.000)	(Ugx.000)
Ordinary shares	60,000	50,000
Profit and loss	5,000	4,000
Non current liabilities		
10% Debentures	15,000	20,000
Current liabilities		
Trade creditors	4,000	2,500
Taxation	2,000	1,000

Proposed dividend	1,500	1,000
Total capital & liabilities	87,500	78,500
Non current Assets		
Premises	10,000	10,000
Fixtures	17,000	11,000
Vehicles	12,500	8,000
Current Assets		
Stock	17,000	14,000
Debtors	8,000	6,000
Bank & cash	23,000	29,500
Total Assets	87,500	78,500

Liquidity Ratios.

Liquidity is the ability of the firm to fulfill its current obligations that is to pay its current debt. The two liquidity ratios are:-

i. Current Ratio

This ratio determines if the firm is in a position to pay current liabilities using current assets. It's normally preferred that current assets should be two times more than current liabilities.

Current Ratio = Current Assets

Current Liabilities

	20X2	20X1
Current Ratio =	48,000	49,500
	7,500	4,500
	= 6.4	= 11

According to the figures above the firm's current ratio is above expected.

ii. Acid test Ratio / Quick Ratio

This ratio determines the liquidity of a firm by ignoring stock (inventories) because sometimes it's difficult to convert stock into cash to pay creditors.

Quick Ratio = Current Assets – stock

Current liabilities

20X2	**20X1**
48,000 -17,000	49,500 – 14,000
7,500	4,500
= 4.1	= 7.8

A ratio of 1.1 is normally preferred. In this case its more than 1 indicating that the firm is in a position to pay its current obligations.

Activity/Assets Ratios

This ratios compares the figure offsets (turnover) with capital given and may be used to determine the return on capital to measure management efficiency in the use of valuable assets.

i. **Stock Turnover**.

This ratio determines how the assets are used to generate sales

$$\text{Stock turnover} = \frac{\text{sales}}{\text{Average stock}}$$

$$\text{Average stock} = \frac{\text{opening stock + closing stock}}{2}$$

$$\text{Average stock} = \frac{14{,}000 + 17{,}000}{2}$$

$$= 15{,}500$$

$$\text{Stock turnover} = \frac{36{,}250}{15{,}500} \times 100$$

$$= 233.87\%$$

The firm is in a position to have its stock turnover more than two times of average stock.

ii. Debtors Ratio

It's used to obtain the average credit period allowed to debtors. It's a factor of 365 days in a year and it's used to express the results in day's ratios than a year.

$$\text{Debtors Ratio} = \frac{\text{Debtors} \times 365}{} \text{ days}$$

Sales

2010

(8,000 x 365) days

36,250

= 80.55 days

= 81 days

iii. Creditors Ratio

It is used to determine the period in which the creditors' obligations need to be settled.

Creditors ratio = creditors x 365 days

Purchases

Opening stock	14,000
Add purchases	24,750
Cost of goods available	38,750
Less closing stock	17,000
Cost of sales	21,750

= 4,000 x 365 days

24,750

= 58.9 days

= 59 days

Sales to fixed Asset Ratio

This ratio indicated whenever the trading value of a company is large enough to justify investments the fixed assets.

Sales to fixed Assets = Sales x 100%

Fixed Assets

= 36,250 x 100%

39,500

= 91.8%

Since the ratio is almost 1.1 it does not justify further investments in fixed assets.

A ratio of 3:1 and above justifies additional investment in fixed assets.

Profitability Ratios

This ratio is used to determine the return on investments and they are used to evaluate the firm's performance regarding its returns.

i. Return on capital employed (ROCE)

It determines the investors returns given the capital employed in the firm. It's normally compared with required rate of return to determine the firm's performance.

ROCE = Profit before interest and tax x 100%

Capital employed

Capital employed = capital + long term liabilities

Shareholders capita & loan capital

Capita employed =Net assets

Net assets =Total assets – current liabilities

=Fixed assets + Current Assets – Current Liabilities

Profit before interest & tax= profit before tax + debentures interest

ROCE = 6,500 X 100%

80,000

=8.125%

ii. Return on investment (ROI)

This measures the return on owner's investment in the company being their total share of capital of and reserves. It indicates the actual return attributable to owners.

ROI = profit after tax x 100%

Total shares of capital + reserves

= 3000 x 100 Reserves =profit & loss= 3,000

65,000 share capital=60,000

= 4.6%

iii. Profit Margin.

The ratio indicates the relationship of operating profit (profit before interest and tax and sales)

Profit Margin = Profit before interest & tax x 100%

Sales

= 6,500 x 100%

36,250

= 17.9%

It's used to determine the profits contributed to pay others interest and tax. It's also an indicator of the operating cost. A lower profit margin indicates a higher operating cost.

iv. Assets turn over.

This ratio is used to determine the turnover of net assets in relation to sales. It indicates whether it's justifying to invest more in assets.

$$\text{Assets turnover} = \frac{\text{Sales}}{\text{Net Assets}} \times 100\%$$

Net assets = Total assets – Current liabilities

$$\text{Assets turnover} = \frac{36{,}250}{80{,}000} \times 100$$

= 45.3%

Revenue Ratios

These ratios are obtained by comparing the figures in trading profit & loss account (income statement) with revenue (sales). This ratio measure costs and the profit structure of the company.

i. Gross profit ratio $= \frac{\text{Gross profit}}{\text{Sales}} \times 100\%$

$$= \frac{14{,}500}{36{,}250} \times 100\%$$

= 40%

ii. Net profit Ratio $= \frac{\text{Net profit}}{}$ x 100%

Sales

$$= \frac{3{,}000}{36{,}250} \times 100$$

$$= 8.28\%$$

Net profit – profit after tax

It indicates the contribution of sales to owner's actual return.

Cost Ratios

These are items of costs in trading profit & account which may be expressed as a percentage of sales. They are used to develop historical ratios which are assumed to be a trend for future fore costing.

(a) $= \frac{\text{Cost of sales}}{\text{Sales}} \times 100\%$

$= \frac{21{,}750}{36{,}250} \times 100\%$

$= 60\%$

(b) $\frac{\text{Selling \& distribution expenses}}{\text{Sales}} \times 100\%$

(c) Administrative expenses x 100%

Sales

Capital Ratios

These ratios are used to compare the outcome of capital (returns) given the profit earned.

i. Capital gearing (leverage)

It's the ratio of debt and equity. If the gearing is high it increases the risk of the firm because the firm has to pay fixed interest on debt capital which may lead to bankruptcy incase of failure.

Capital gearing = Debt capital x 100%

Equity capital

	20X2	20X1
Debt	15,000	20,000
Equity capital	65,000	54,000
Ratio	23.08%	37.04%

ii. Equity Ratio

This ratio measures the relationship between capital employed and equity capital.

Equity ratio = Capital employed x 100%

Equity

	20X2	20X1
Capital employed	80,000	74,000

Equity capital 65,000 54,000

Ratio in 123.08% 137.04%

Shareholders Ratios

These ratios are of a major concern to shareholders or respecting shareholders of a firm. They are used to compare the firm's returns given the values of share.

i. Dividend Yield

It measures the real return to shareholders

Dividend yield = Dividend per share x 100%

Market price per share

= Dividend 0.20

Market share 3.90

= 0.20 x 100%

3.90

= 5.13%

ii. Dividend Cover

In addition to dividend pay to shareholders some profits are retained in the company for purpose of growth. The dividend cover indicates the proportion of distributable profits in the year.

Dividend cover = Profit per ordinary share X 100%

Ordinary share dividend

= if profit per share = Ugx 2

Dividend per share = Ugx. 0.2

= Ugx 0.2 x 100%

Ugx .2

= 1000%

iii. Earnings per share (EPS)

This is the total earnings accorded to ordinary shareholders.

EPS =Net profit – Preference shares dividend

No. of ordinary shares

Profit / Price earning Ratio = Market price per share

Earnings per share.

REFERENCES/FURTHER READING

Capstaff, J., Paudyal, K. And Rees, W. (1998), "Analysts' Forecasts of Germany Firms' Earnings: A Comparative Analysis." Journal of International Financial Management & Accounting 9, no. 2, pp 83 –116.

Das, S., and Saudagaran, S. (1998), "Accuracy, Bias, and Dispersion in Analysts' Earnings Forecasts: The Case of Cross-Listed Foreign Firms." Journal of International Financial Management & Accounting 9, no. 1, pp 16 –33.

Kim, E. Y. (1996), A Cross-Cultural Reference of Business Practices in a New Korea, Westport, Connecticut: Quorem Books.

6.6 SOCIAL ACCOUNTING

INTRODUCTION

Social accounting is the process of communicating the social and environmental effects of organizations' economic actions to particular interest groups within society and to society at large.

HISTORY

Social accounting as an approach began developing in the UK in the early 1970s–The Public Interest Research Group established Social Audit Ltd.

6.6.1 DEFINITION OF SOCIAL ACCOUNTING

"An approach to reporting a firm's activities which stresses the need for the identification of socially relevant behavior, the determination of those to whom the company is accountable for its social performance and the development of appropriate measures and reporting techniques."

PURPOSE

ACCOUNTABILITY

MANAGEMENT CONTROL

SCOPE

FORMAL ACCOUNTABILITY–SELF REPORTING AND THIRD PARTY AUDITS–REPORTING AREAS–AUDIENCE

OBJECTIVES OF SOCIAL ACCOUNTING

- Net income contribution
- Human resource contribution
- Public contribution
- Environmental contribution
- Product or service contribution

EFFECTIVE UTILIZATION OF NATURAL RESOURCES:

HELP TO EMPLOYEES

HELP TO SOCIETY

HELP TO CUSTOMERS

HELP TO INVESTORS

To identify and measure the contribution of a firm towards the society.

To determine if the firm's strategies are consistent with social priorities.

To make available, relevant information about the firm's goals, programmes, performances, use of scare resources.

To Quantify and properly present the social costs and benefits of an enterprise.

Features

Expression of a company's social responsibilities.

Related to the use of social resources.

Emphasize on relationship between firm and society.

Determines desirability of the firm in society.

Application of accounting on social sciences.

Emphasizes on social costs as well as social benefits.

Easy to understand the activities of the firm.

BENEFITS

Social accounting will provide you with an ongoing record of how your organization or enterprise has developed and changed over time.

You will get feedback on how things are going from the range of people involved in your organization or enterprise.

You will be able to identify the areas where things are working well and not so well—and you can use this information to help continue what you are doing well and make improvements to change what's not working so well.

You will have a record of what your organization or enterprise is doing and the sorts of impacts it is having

information you can use when applying for grants and funding, for reporting on grants, and for promoting what you do.

It counters the adverse publicity or criticism leveled

It assists management in formulating policies and programmes.

The firm proves that it is not socially unethical

It acts as an evidence of social commitment.

It improves employee motivation.

Necessary from the view point of public interest groups, social organisations investors and government.

It improves the image of the firm.

The management gets feedback on its policies aimed at the welfare of the society.

It helps in marketing through greater customer support.

It improves the confidence of shareholders of the firm.

Social Accounting Approaches

Classical Approach: Milton Friedman. The social responsibility of business is to use its resources and engage in activities designed to increase its profits.

Descriptive Approach: Social activities of a business are presented along with financial statements in a narrative form.

Integral Welfare Theoretical Approach: It advocates the preparation of a social report comprising social benefits and social costs.

Social Indicator (Brummet Approach): Different areas of social contribution to be undertaken. Total performance = Net income + Human resource combination + public contribution + Environmental contribution + Product/Service contribution.

Linowes operating statement approach: Social contribution = Social benefits –Social costs.

CHALLENGES

For small, member-based community organizations and enterprises the biggest challenge is finding a way to regularly carry out social accounting with no staff, no time and no budget! It is therefore important that the social accounting process be as simple as possible so that it does not impose too heavy a burden on members.

BASED ON THREE STEPS

Planning – identification stage
Accounting – deciding on the scope and setting up the social accounting System
Reporting and Auditing – collecting information and submitted to an

Step 1: Scoping

The first step is to identify three key elements of your community organization or enterprise:

Values, aims and objectives
Activities
Stakeholders.

Step 2: Accounting

Design
Collect information
Characteristics

Step 3: Reporting and Responding

Relevant information
Results

6.7 PUBLIC SECTOR ACCOUNTING

LEARNING OBJECTIVES

Readers will be able to:

Understand the objective of public sector accounting
Identify the various users of Public sector accounting information
Have good grasp of constitutional and regulatory framework as well as the concepts, principles and bases of public sector accounting

The heart of the public sector is the sovereignty of governments ultimately controlled by politicians. For a national or central government, this sovereignty extends over a whole country, including its economy; for a state/county/province government within a federation/central/national, the sovereignty extends over its individual state/county/province.

**Definitions of common concepts in use:

Accounting: -This refers to a systematic recording and analysis of financial transactions of a business, or public sector.

It is a generally a scientific study in which records of expenditure and income of a company, individuals or government are kept coupled with other useful information for planning, decision making and control.

Finance: A branch of economics which is concerned with resource allocation as well as resource management, acquisition and investment.

Definition of Public Sector Accounting:

Government finance (or, Public Sector Finance as it is commonly known, deals with the allocation of resources in accordance with the budget constraint of a public sector organization, especially government.

It is a composite activities of analysing, summarizing, recording and interpreting the financial transactions of the Government Ministries, Departments and Spending Agencies.

Public Sector Accounting and Finance in simple definition means "the process of recording, communicating, summarizing, analysing and interpreting government financial statements and statistics in aggregate and details; it is concerned with receipts, custody and disbursement and rendering of stewardship of public funds entrusted.

OBJECTIVES OF PUBLIC SECTOR ACCOUNTING

The main purposes of public sector accounting are:

Ascertaining the legitimacy of transactions and their compliance with established norms, regulations and statutes. Public sector disbursement should accord with the provisions, appropriate acts and financial regulations. There should be due authorizations for all payments so as to avoid an act of fund misappropriation.

Providing evidence of leadership: The act rendering stewardship is being able to account transparently and diligently for the resources entrusted. Government and public sector operators are obliged to display due diligence and sense of probity in the collection and disposal of public funds.

Evaluating costs incurred and benefits derived: In Public sector, it is difficult to measure the costs and benefits in financial terms in all aspects. The analysis of cost-benefit assesses the economic and social advantages (benefits) and disadvantages (costs) of alternative courses of actions, to ensure that comfort of the citizens is well catered for.

Other objectives are:

Providing basis for decision making.

Highlighting various sources of revenues receivable and expenditure to be incurred

Identifying the source of funds for capital projects.

Evaluating the ***economy, efficiency*** and ***effectiveness*** with which the public sector institutions pursue their goals and objectives.

Ensuring that costs are matched by at least equivalent benefits accruing there from.

Providing details of outstanding long term commitments and financial obligations.

Providing means by which actual performance may be compared with the target set.

Eliminating corruption.

Modernisation of the financial management system of the public sector entities;

USERS OF PUBLIC SECTOR ACCOUNTING INFORMATON:

The users of public sector accounting information can be categorized into two namely; ***internal*** and ***external*** users

(i) *Internal users*: this consists of the people such as the president of the country, Ministers, secretary to the treasury, accountant general, auditor general, chief executive officers of parastatals etc. and heads of government departments

(ii*) External users*: This group comprises of: the National Assembly, members of the public, foreign countries, international financial institutions such as international Monetary Fund (IMF), Africa Development Bank (ADB), World Bank; creditors both locally and internationally, political parties, Trade Unions and Researchers. International rating agencies such Fitch, Morgan etc.

THE IMPORTANCE OF PUBLIC SECTOR ACCOUNTING TO THE USERS.

The internal users require the accounting information in order to ascertain the various levels of regulatory compliance and whether the actual expenditure is in accordance with the budget.

Further they would like to ascertain whether or not adequate safeguards are available for the protection of public resources.

Conversely, the external users would need the information to ascertain the financial viability of public sector organizations and the efficiency and effective management.

CONSTITUTIONAL AND REGULATORY FRAMEWORK OF PUBLIC SECTOR ACCOUTING

The public sector accounting is regulated by the following:

(i) The Constitution of a country. The constitution of the country is one of the legal frameworks that regulate the receipt and disbursement of public funds**.**

Auditor general's office. The office of the auditor general is mandated by the constitution to audit all government ministries and spending agencies. This is to ensure that

accountability of government resources is done. The auditor general's report is submitted to the president and thereafter to parliament.

Accountant general's office, an office mandated to prepare government financial statements.

Finance/Treasury Circular: These are administrative tools which are used to amend the existing provisions of Financial Regulations, Public Service Rules and introduction of new policy guidelines. The circulars are usually issued by Secretary to be Cabinet or the Secretary to the Treasury. In some cases by the Permanent Secretary for Cabinet office or Ministry of Finance of course under the guidance of their superior.

Public Procurement Act: This is a procurement Act of each country which guides on government procurements. For instance in Uganda, Kenya etc, the Ugandan or Kenyan Public Procurement Authority, an Institution mandated to monitor and overseeing public procurements; standard setting, developing legal framework and professional capacity for public procurement in the country.

CONCEPTS AND PRINCIPLES APPLICABLE TO PUBLIC SECTOR ACCOUNTING

Concepts have been defined as broad basic assumptions which underlie the preparation of financial statement of an enterprise. Public sector accounting is an integral but separate branch of financial accounting sharing in common many concepts and principles applicable in the private sector. These concepts include: **Consistency, Materiality, Periodicity, Duality, Historical, prudency, Going concern etc.**

BASES OF PUBLIC SECTOR ACCOUNTING

There are ***three bases*** on which financial statements of Public Sector Institutions are compiled. These are:

The Cash Basis

The Accrual Basis

The Commitment Basis

Cash basis accounting records financial transactions when income is received and expenses are paid. It is easy to learn and carry out and requires no special accounting skills. **The Cash Basis**: This is a basis of accounting under which ***revenue is recorded only when cash is received, and expenditure recognized only when cash is paid***, irrespective of the fact that the transaction might have occurred in the previous accounting period.

Advantages of Cash Basis:

It is simple to understand

Its eliminates the existence of debtors and creditors

It permits easy identification of those who authorize payments and collect revenue

It allows for comparison between the amount provided in the budget and that actually spent.

It saves time and easy to operate

It permits the delegation of work in certain circumstances

The cost of fixed assets is written off in the year of purchase resulting into fewer accounting entries

Disadvantages of Cash Basis

It takes unrealistic view of financial transactions as only the settlement of liabilities recognized.

It does not provide for depreciation since assets are written off in the year of purchase

It does not convey an accurate picture of financial affairs at the end of year.

It cannot be used for economic decisions since it tends to hide basic information e.g. missing information relating to fixed assets, debtors and creditors

It does accord with 'matching concept'

*__*Modified Cash Basis*__: under this basis books of accounts are left open for a maximum of three months after the end of year, so as to capture substantial amount of income or expenses relating to the year just ended

(ii) Accrual Basis

> Accrual basis recognizes as income what a government or public-sector entity has earned or is entitled to receive, even before payment is received, and recognizes as an expense what it is obliged to pay, when billed or contractually liable, even before payment is made.

Under this method, revenue is **recognized when earned** and ***expenditure acknowledged as liabilities when known*** or ***benefits received***, notwithstanding the fact that the receipts or a payment of cash has taken place wholly or partially in other accounting periods.

It based on the principle of matching income and expenditure to the ***time a transaction occurs rather than when payments are made*** or ***received***. This means that an expense is recorded at the ***point goods or services are received*** by an organisation rather than thirty days later when the invoice for goods is paid. Similarly, income is recorded at the point the sale is made

The accrual basis is practiced in private sector and all parastatals.

The reason private sector uses this method is because private concern are for profit oriented

Therefore, it is necessary to estimate the profit made in each period with the view to keeping investment assets intact and making periodic distributions to shareholders by way of dividends.

Advantages of Accrual Basis:

It takes a realistic view of financial transactions

It gives an accurate picture of the state of financial affairs at the end of the accounting period

It aligns itself with matching concept

It can be used for both economic and investment decision-making as all parameters for performance appraisal are available.

It gives allowance for depreciation of assets used in generation revenue for the enterprise

Disadvantages of Accrual Basis

It is difficult to understand, especially by non accountants.

It does not permit easy delegation of work in certain circumstances

(iii) Commitment Basis

It is a basis that records anticipated expenditure evidenced by contract or purchase order.

In public sector financing, budgetary and accounting systems are closely related to commitment basis

Advantages of Commitment Basis

It is an aid to financial control since it is regarded as a charge made on budget provision.

It can give a separate payment tabulation when it is required/requested.

It takes a realistic view of financial transactions.

It reveals an accurate picture of state of financial affairs at the end of accounting period.

It aligns itself with matching concept.

It can be used for both economic and investment decision-making as all parameters for performance appraisal are available.

It gives allowance for depreciation of assets used in generation revenue for the enterprise

Disadvantages of Commitment Basis

The system involves extra work. Actual figures have to be substituted for commitment provisions to finally determine the running balances under sub-head of expenditure

Over expenditure is more under commitment basis in the expectation that the government may finally release funds to settle the obligations

At the end of the financial year, all commitments that are subject of unfulfilled orders have to be written back to reflect the exact picture of transactions which took place during the year.

COMPARISON BETWEEN GOVERNMENT ACCOUNTING AND PRIVATE SECTOR ACCOUNTING

The main objective of commercial enterprise is to maximize profit while that of government is to provide adequate welfare to people at reasonable costs.

Government revenue is derived from the public in terms of taxation, fines, grants, fees, etc, where as business concerns obtain their income from sale of goods and services

In government financial transactions are recorded on ***'Cash basis'*** while in private sector it is ***on accrual basis.***

In Public sector accounting, tangible fixed assets such as land and building, plant and machinery are not shown in the balance sheet whereas, in private sector accounting they are reflected, showing Historical Cost, Accumulated Depreciation and Net Book Value (NBV) of each.

In public sector accounting, current assets such as stocks and debtors are not shown on the balance sheet where as in private sector accounting system both current assets and liabilities are shown.

In government there is no Annual General Meeting (AGM) of stakeholders/shareholders, unlike the private sector which has the AGM. In government what happens is just holding public briefing on specific issues.

In Public sector what operates mostly is the fund accounting, where as in private sector the proprietary approach is adopted.

Questions for class

What are the objectives of public sector accounting?
Who are the users of public sector accounting?
What is the importance of public sector accounting?
Discuss the constitutional and regulatory framework of public sector accounting.
Discuss in detail the concepts, bases and principles applicable to public sector accounting.

Reading Materials

Engler, C, Bernstein, L. A and Lambert, K. L (1995). Advanced Accounting, 3rd, Richard.

Wood, Frank and Sangster. A. (2008). Frank Woods Business Accounting II, 11th ed, Prentice Hall.

Barry J. Epstein and Eva K. Jermakowicz. (2011). Interpretation and Application of international financial reporting standards.

International Accounting Standards Board, London (2011). International Financial reporting Standards.