

Updating Your Study Manual

Instructions for Inserting Version 1.1, 2003

The followings serve as the instructions for updating **Topic 2: Accounting and Financial Statement Analysis** of Study Manual 11 for the Licensing Examination for Securities and Futures Intermediaries. Please be reminded that only the updated sections are provided for downloading. You may replace the relevant sections with this updated version for the study manual you possess.

Instructions:

1. Download and print out the following pages.
 2. **Remove** the original front page and **insert** the updated front page.
 3. **Remove** pages 2-1 to 2-2 and **Insert** new pages 2-1 to 2-2.
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STUDY MANUAL FOR

PAPER 11

Corporate Finance

of

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for Securities and Futures Intermediaries

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Topic overview

This topic provides participants should the basic knowledge required to obtain meaningful information from a set of financial statements.

The topic focuses on the following areas:

- accounting concepts, principles and practices that underpin financial statements
- disclosure of the basis of preparation of financial statements
- the three key documents: balance sheet, profit and loss statement and statement of cash flows
- extracting and utilising financial ratios.

Learning outcomes

At the end of this topic, participants should be able to:

- a) prepare a set of financial spreadsheets to facilitate a detailed analysis of a company's financial statements
- b) read, understand and appraise the notes on accounting policies
- c) compare a company's accounting policies to standard practice
- d) assess a company's financial status at period end and relate it to the past position
- e) assess a company's operational results for a particular period and compare them to past and projected performance
- f) prepare an analysis of cash flows for a particular period and obtain significant information from it about a company's operational performance
- g) identify areas for special consideration in the notes to the accounts
- h) compare a company's overall financial position and performance to its peers, to investor's expectations, and its risk profile
- i) understand and meaningfully participate in the current debate about accounting standards, practices and disclosure requirements.

1 Background

1.1 Introduction

Most readers of this study manual will be reasonably familiar with at least the rudiments of financial statement analysis. Participants are expected to understand the difference between a *balance sheet* and a *profit and loss statement*, and be able to calculate the key ratios.

Nevertheless, it is critical that participants' understanding of financial statements goes well beyond that. Recent concerns about invalid accounting policies led to severe pressure on the stock prices of companies across the globe. Examples include Elan in Ireland, Enron, Tyco and PNC Financial Services in the USA, and Guangnan Holdings and International Capital Network (Holdings) in the region. The Enron and Tyco cases, to name only two, have vividly demonstrated how accounting policies, procedures and practices are critical to stated earnings, to the value of companies and to the consequent degree of investor and lender interest in them. Therefore, this topic will focus on *how* and *why* financial statements are prepared the way they are, how accounting standards differ from country to country, and why users of financial statements need to exercise considerable care and attention to what might otherwise seem obscure material.

Accounting is an attempt to represent *physical* transactions in *financial* terms. In order for this to be done in a rational manner, accounting has created a number of fundamental assumptions and principles. These assumptions and principles are often stated in the professional manuals issued by each country's accounting body. [As of 17 November 2003, the Hong Kong Society of Accountants has issued 30 Statements of Accounting Practice, and 15 Interpretation Notes.](#)

1.2 Accounting assumptions and principles

The most fundamental assumption is that whatever somebody paid for something represents its value. Logic would dictate that most investments are made because the buyer believes that the purchase price understates the value to the buyer. Nevertheless, to reduce the element of judgment in accounting statements, the *historical cost* (in other words, the total cost of acquiring and, where appropriate, installing the item) is the value at which all transactions are recorded in an entity's *books of account*.

The concept of double-entry accounting, which is fundamental to how accounts are prepared, states that every transaction has two *economic impacts*. Buying a newspaper, for example, reduces one asset (cash) and increases another (the buyer's "inventory" of newspapers). Selling a basket of shares with deferred delivery reduces one asset (inventory of shares) and increases another

4) Asset utilisation.

There are a series of commonly used ratios for each of these areas, which are set out below. However, analysts routinely develop industry-specific ratios to complement these standard ratios.

<i>Liquidity</i>	Current ratio	$= \frac{\text{current assets}}{\text{current liabilities}}$
	Quick (or acid-test) ratio	$= \frac{\text{current assets minus inventory}}{\text{current liabilities}}$
<i>Gearing</i>	Gearing (or debt-equity) ratio	$= \frac{\text{total liabilities}}{\text{shareholders' funds}}$
	Long-term debt ratio	$= \frac{\text{long term debt}}{\text{total debt}}$
	Debt ratio	$= \frac{\text{total liabilities}}{\text{total assets}}$
	Make-up of debt	$= \frac{\text{secured debt}}{\text{total debt}}$
	Interest cover	$= \frac{\text{Earning Before Interest \& Tax}}{\text{interest expense}}$
<i>Performance</i>	Gross margin	$= \frac{\text{gross profit}}{\text{sales}}$
	Operating margin	$= \frac{\text{Earning Before Interest \& Tax}}{\text{sales}}$
	Return on equity	$= \frac{\text{net profit after tax}}{\text{shareholders' funds}}$
	Return on assets	$= \frac{\text{net profit after tax}}{\text{total assets}}$
<i>Asset utilisation</i>		
	Receivables turnover	$= \frac{\text{average receivables} \times 365 \text{ days}}{\text{sales}}$

$$\text{Inventory turnover}^{15} = \frac{\text{average inventories}}{\text{cost of goods sold}} \times 365 \text{ days}$$

$$\text{Payables turnover} = \frac{\text{average payables and accruals}}{\text{cost of goods sold}} \times 365 \text{ days}$$

$$\begin{aligned} \text{Cash conversion ratio} &= \text{Receivables turnover} \\ &+ \text{Inventory turnover} \\ &+ \text{Payables turnover} \end{aligned}$$

$$\text{Fixed asset turnover} = \frac{\text{sales}}{\text{fixed assets}}$$

4.2 Cash-flow analysis

It is accepted that accrual accounting generates a valid and accurate representation of the impact of the economic events over the period.

However, it does not tell the reader where the cash came from and went to. In finance, we are more concerned with cash flows than accounting income. Good cash flow analysis is an essential component of reading financial statements:

- In the long term, companies that are not generating sustainable cash flow from operations are unlikely to flourish.
- There is strong evidence that, where companies are failing, the signals of failure show up earlier in their cash flows than in accrual accounted ratios.
- Cash flow analysis has the capacity to penetrate or compensate for many cosmetic accounting exercises: it is therefore more reliable when borrowers are attempting to mislead readers.
- Careful preparation of cash flow analyses, with segmentation of operating and non-operating cash inflows and outflows, provides additional information. They indicate the way in which management of a business has managed issues such as the problems of growth, matching of maturities of assets and liabilities, and of debt and equity.

Cash-flow analysis is therefore strongly recommended as a complement to conventional analysis of financial statements: in fact, it should be done as part

¹⁵ The *Australian Financial Review* of 2 November 2001 reported that the days inventory of Harris Scarfe, a failed Australian department store, had increased between 1996 and 2000 from 74 (about 2 months) to 112 days (about 3 months).

of the process of *spreading*¹⁶ the financial statements.

Conventional financial statements present a form of cash-flow reporting which separated cash flows between:

- cash flow from operating activities;
- cash flow from investing activities; and
- cash flow from financing activities.

However, this can be misleading because:

- 1) The description of *operating cash flows* includes a number of non-operating items, such as interest and dividends received and non-operating income received.
- 2) Operating cash flow is also calculated after deducting interest expense. Interest expense is not an operating cash flow; it is an expense of *funding* the cash flow. The ratio of *net operating cash flow* to interest expense has been found to be a very reliable early warning signal of potential financial difficulties.
- 3) Separation of financing obligations (i.e. interest and mandatory principal repayments) from new debt and equity drawings is often a very significant indicator of how a company has approached its financing task.
- 4) Inclusion of *other income* as a non-operating source of income will often identify companies that are dangerously dependent upon non-mainstream income for their survival.

In an article in the *Australian Financial Review* discussing the collapse of Harris Scarfe¹⁷, Greg Whittred noted that

“...when you remove non-retail revenues (interest, dividends, trust distributions and sundry), net of the estimated costs of generating these revenues, along with any gain/loss on asset disposals, it is possible to draw the inference that in only one of the past six years has the department store operation (i.e. Harris Scarfe’s main operating business) been other than marginally profitable...”

¹⁶ Spreading is the process of transferring financial information to a standard financial analysis spreadsheet form. This allows easier year-on-year comparison of data and calculation of ratios, and very often highlights where a company has restated financial information between years.

¹⁷ Greg Whittred, “Another case of growing broke”, *Australian Financial Review*, 2 November 2001.

Quick check 7:

In relation to company accounts, what is cash flow?

Answer:

The cash flow is the reported net income plus amounts charged off for depreciation, amortisation, and extraordinary charges to reserves, which are bookkeeping deductions and not paid out in actual dollars and cents.

5 Special topics in accounting

5.1 Accounting for business combinations

In a period where merger and acquisition activity is intense, issues related to accounting for business combinations become of paramount importance. This reflects a certain inadequacy on the part of generally accepted accounting standards. Because of the historical cost convention, *financial statements do not reflect current values*. A set of published financial statements, though reputable, is not a valuation statement.

If a company establishes a new and wholly-owned subsidiary, historical cost accounting is not a particular problem. Certainly, if that subsidiary is successful, the failure of conventional accounting to recognise – under normal circumstances – the value of goodwill created organically reinforces the inadequacy of the consolidated financials as a statement of values.

However, one area of difficulty arises when the subsidiary is not wholly owned. When consolidating such a subsidiary, it is necessary to segregate the proportion of shareholders' funds that “belongs” to the minority in the subsidiary. The following consolidation exercise illustrates this process: