



Atlantic International University
Master in Business Administration
Assignment on Accounting

Student name: José Chilengue	ID#: UM60607BBU69650
Degree: MASTER OF BUSINESS ADMINISTRATION	Major: BUSINESS ADMINISTRATION
Phase 3 Courses	

ACCOUNTING ASSIGNMENT

TABLE OF CONTENT

- 1. Introduction..... 3**
- 2. The Accounting Environment..... 3**
 - 2.1 Definition and Purposes of Accounting..... 4
 - 2.2 The Origins of Accounting..... 6
 - 2.3 Generally Accepted Accounting Principles (GAAP)..... 7
 - 2.4 International Financial Reporting Standards (IFRS)..... 7
- 3. Accounting Process and Fundamentals of Bookkeeping..... 8**
 - 3.1 The Accounting Equation..... 8
 - 3.2 The Accounting Process and the Fundamentals of Bookkeeping..... 8
 - 3.2.1 Journal Entries..... 11
 - 3.2.2 The Ledger..... 12
 - 3.2.3 The Trial Balance..... 14
 - 3.2.4 Suspense Account..... 15
 - 3.2.5 Adjusted Trial Balance..... 16
- 4. Financial Statements..... 17**
 - 4.1 Concept of Financial Statements..... 17
 - 4.2 The Income Statement..... 17
 - 4.3 Owners’ Equity Statement..... 18
 - 4.4 The Balance Sheet..... 18
 - 4.5 Cash Flow Statement..... 19
- 5. Key Financial Ratios..... 19**
 - 5.1 Liquidity Ratios..... 20
 - 5.2 Activity Ratios..... 21
 - 5.3 Leverage Ratios..... 21
 - 5.4 Profitability Ratios..... 21
 - 5.5 Market Ratios..... 22
- 6. Internal Accounting Control System..... 22**
- 7 Short-Term Decision-Making Process..... 23**
- 8 Key Learnings..... 24**
- 9 Conclusion..... 25**
- 10 Bibliography..... 27**

LIST OF ANNEXES

Annex A..... 28

Annex B..... 29

Annex C..... 30

Annex D..... 31

Annex E..... 31

Annex F..... 32

Annex G..... 33

Annex H..... 34

1. Introduction

This assignment is about Accounting. From my perspective as a business manager and prospect entrepreneur, my purpose on doing this course was to seek to understand and apply knowledge on accounting as a function, its conventions, principles and processes. I intended to consolidate by basic knowledge about this mysterious discipline by way of better grasping the practical use of the accounting fundamental equation, the rules of debiting, crediting and balancing accounts, as well as the construction and interpretation of the main financial statements.

It was also my purpose to learn how to better control a business under my responsibility from an accounting point of view and how to use accounting to harness my capacity to take more informed and robust business decisions.

The assignment sets off by clarifying the concept, purposes and origins of accounting (Section 2) and moves on to analyzing the entire accounting process, from bookkeeping to developing a trial balance (Section 3).

Section 4 is dedicated to the actual crafting of the four main financial statements, whereas in section 5, the financial statements are analyzed and interpreted through key financial ratios

Internal accounting control and short-term decision-making processes are analyzed in Sections 6 and 7, respectively.

My key learnings from this course are summarized in Section 8.

2. The Accounting Environment

Everyone needs accounting information at some point in life. It is crucial for taking important financial decisions such as applying for a loan from a bank, paying taxes to government entities, opening and running a business, purchasing goods or services in a market, etc.

Profit generating businesses need reliable and timely financial information provided by the accounting function to accomplish their day-to-day duties. Even non-for-profit

organizations such as hospitals, churches, charities or even governments, need to have some sort of financial information provided by accounting services.

In this assignment, I will be focusing on accounting as a system that generates and supplies accounting/financial information to for-profit businesses and the impacts from that information in their decision-making processes.

2.1 Definition and Purposes of Accounting

What is Accounting?

According to the American Accounting Association¹, accounting is the system through which businesses manage to identify, record, classify, measure and communicate their economic information, to facilitate informed judgement and decision-making². In other words, 'accounting is a service provided for those who need information about an entity's financial performance, its assets and its liabilities.'³

Specifically, accounting process consists of the following functions of groups of functions:

1. Observe, identify and measure in financial terms all economic activities (Analysis);
2. Record, classify and summarize economic events or activities;
3. Report on economic events by ways of financial statements and special reports. Also, accountants interpret financial statements and reports for various groups, such as management, investors, creditors, by determining how the business is performing compared to prior years and other similar businesses.

Accounting is not bookkeeping. Bookkeeping is a mechanical process that records the routine economic activities of a business, from a transaction through to journal entry, ledger and trial balance. Accounting includes bookkeeping but it goes beyond it in scope. Accounting analyses and interprets

¹ American Accounting Association (Evanston, Ill., 1966, pp. 1), in Hermanson, Edwards and Maher, pp. 15

² Hermanson, Edwards and Maher, pp. 16

³ Dyson, pp. 4

financial information, prepares financial statements, conducts audits, design accounting systems, prepare special business and financial studies, prepare forecasts and budgets, and provide tax services.

The purposes of accounting include, *inter alia*, to:

- (i) establish what a business owns by way of assets;
- (ii) establish what a business owes by way of liabilities;
- (iii) establish a business' profitability or otherwise, at certain time intervals, and how that profit was achieved.

Accounting is an information system that generates information about resources in a business and their impact on decision-making processes. This information is presented through financial statements. The main receivers of financial statements are business owners and creditors, among others.

Accounting financial information can be used for several other purposes, when, for instance:

- Bank officials need such information to assess whether an applicant is capable or not to repay a loan;
- Prospective investors use the information to decide whether a particular company is a good investment or not;
- Business managers use the same information to consubstantiate good decision-making. It helps them to evaluate the financial consequences of the various alternatives at their hands, without a need for a crystal ball, thus reducing uncertainty when making professional judgements about quantifying the future financial impacts of taking or delaying an action.
- Accounting tells the stockholders about how a business is managing the investments.

Accounting can be divided in three parts:

1. *Bookkeeping* – the recording of transactions;
2. *Financial accounting* – reporting of financial information in a monetary and financial terms to interested parties;

3. *Management accounting* – the controlling of the events within a business for decision-making purposes.

2.2 The Origins of Accounting

The Ancient Babylonia

Accounting is an old discipline that has existed since about as 4000 BC. The first dynasty of Babylonia (2286-2242 BC) was located in Uruk (Mesopotamia), in what is known today as Iraq. The Babylonia's law was based on the Code of Hammurabi, which required merchants trading goods to give buyers a sealed memorandum⁴ quoting prices or, otherwise, the trade would not be legally enforceable. This procedure helped reduce the sources of conflict and it provided some integrity in the transactions. The sealed memorandum or the so-called 'clay tablet' scribe was the predecessor of the modern sole proprietors⁵ accounting.

As result of the Crusades, between the 11th and the 13th century, trading centers were formed in the Northern Italy. The people from this region were less illiterate than those of ancient Babylonia, and they were capable to form the first business partnerships⁶.

In partnerships, the concepts of assets and liabilities began to take shape and to become important because both partners are responsible for the business' liabilities in case the partnership fails. This arrangement is known as 'Mutual Agency' and 'Unlimited Liability'.

In Mutual Agency, each partner has the power to act for, and legally oblige, all other partners whereas in Unlimited Liability, once the business assets are exhausted the personal assets of the owners can be used to satisfy liabilities of

⁴ Pictographic tables of clay (clay tablets).

⁵ A sole proprietor enterprise is a business owned by one person, whose personal possessions are at risk if the business fails.

⁶ A partnership is a business owned by two or more people whose personal wealth is at risk if the business fails.

the business: **Net assets = assets – liabilities**. In other words, only after clearing all liabilities can the owners of a business claim their net assets.

In 1494, Luca Paccioli⁷, a Franciscan Monk, introduced the double-entry bookkeeping method which was then described as the “Method of Venice System”. Paccioli is now renowned as the father of modern accounting.

2.3 Generally Accepted Accounting Principles (GAAP)

One of the main tasks of accountants in a business is to produce financial reports to several target audiences. For those audiences to interpret and understand the reports in a similar way, the reports must have been prepared in a standardized format.

The set of standards applied by all accounting professionals issuing financial reports within a given country is known as Generally Accepted Accounting Principles (GAAP). Financial regulatory bodies are responsible for determining such principles, based on inputs from businesspeople and accounting professionals countrywide.

These principles guarantee that the financial statements are prepared using the same rules by every company that issues financial reports for the outside world.

2.4 International Financial Reporting Standards (IFRS)

International Financial Reporting Standards (IFRS's) are specific global accounting rules that public companies use to prepare and publish their financial statements, which are accepted internationally.

These standards are of particular importance in the globalized economy we live in today, where accounting/financial events happening in one country are of interest to one or more entities located in different other countries. For all these entities to be able to interpret and understand financial statements in a similar manner, these

⁷ Paccioli released a paper named “Summa de Arithmetica, Geometria, Proportion et Proportionate”.

need to have been prepared in a standardized format, using the international financial reporting standards (IFRS).

IFRS's are generally principles-based and their content is less detailed than that of GAAP's.

3. Accounting Process and Fundamentals of Bookkeeping

3.1 The Accounting Equation

In any business, the value of assets is equal to the value of capital and liabilities that make the source of finance. This statement is known as the 'Bookkeeping Equation' or the fundamental accounting equation, and it is represented as follows:

$$\text{Assets} = \text{Capital} + \text{Liabilities}$$

or

$$\text{Assets} - \text{Liabilities} = \text{Capital}$$

or

$$\text{Assets} - \text{Capital} = \text{Liabilities.}$$

3.2 Accounting Process and Fundamentals of Bookkeeping

Accounting records, classifies and summarizes financial data transactions into a meaningful format, by way of financial statements such as balance sheet and income statement.

The accounting process includes all the accounting steps performed by an accountant from the time an accounting transaction is made (source document) through to the creation of a trial balance (TB). In summary, these steps are:

- (i) Source document (evidence that a transaction was made);
- (ii) Journal entry;
- (iii) Creation of ledger account(s)
- (iv) Summary of balances in a trial balance.

The information from a trial balance, once adjusted, feeds the following financial statements:

- a) Income Statement;
- b) Balance Sheet
- c) Statement of Change in Equity.

For the Cash Flow statement, the source information is mainly from the ledger account.

The Financial Statements have five (5) main elements:

- (i) Assets
- (ii) Liabilities
- (iii) Equity
- (iv) Expenses
- (v) Revenue.

Assets, liabilities and equity are the main elements used for the Balance Sheet, while expenses and revenue are used for the Income Statement.

Assets are all the resource owned or controlled by an entity, as result of past events, and from which future economic benefits are expected to flow to the entity. (Example: Buildings, machinery, vehicles, etc., whether bought or leased).

Assets can be divided into two categories: Fixed assets and current assets.

Fixed assets are possessions which are relatively permanent and which are used over a reasonable period of time and are not constantly changing in value. Fixed assets are needed to enable a business to operate and make profit, but they are not kept with the set purpose of making profit on them. Examples: Machinery, vehicles, equipment such as computer, etc.

Current assets, also known as 'circulating assets' are possessions which are constantly changing in value and it is through the movement of these assets that owner of a business expect to make profit.

Expenses include costs of operations that a company incurs to generate revenue, and from which no further benefit is expected. (Example: Salaries, water, electricity, rent, etc.)

Liability is a present obligation of the entity to transfer an economic resource as result of a past event. It is a claim of outsiders on total assets of the company. (Example: Unpaid purchases, loans, etc.). Liabilities can also be split in *current* and *non-current* liabilities.

Equity (or Capital, share capital or preferential share capital) is the money that is invested by the owners into the business or it is a residual interest in the total asset of an entity. Entity is therefore a claim of owners in the total assets of the business.

Revenue (or Income) is the gross inflow of cash receivables or other considerations, arising in the course of the ordinary activities of a business (such as sales of goods, rendering of services, etc.), interest received, rent received, etc.

The Double-Entry Concept

In 1494, Luca Paccioli introduced the double-entry bookkeeping method known as the “Method of Venice System”. According to this system, double entry transaction means:

DEBIT⁸ Transaction **CREDIT⁹**

The accounting function seeks to record both effects of a transaction or event in the entity’s financial statements, because, according to Paccioli, every transaction follows the “dual aspect” principle, according to which it has, at least, two accounting effects – Debit & Credit.

It is a convention in moder accounting that each of the five elements of financial statements has a specific accounting balance, as indicated in the table below:

⁸ The left side of an account

⁹ The right side of an account

THE MODERN EQUATION PRINCIPLES

Account	Balance	When balance increases	When balance decreases
Asset	Debit	Debit	Credit
Expense	Debit	Debit	Credit
Liability	Credit	Credit	Debit
Equity or Capital	Credit	Credit	Debit
Revenue or Income	Credit	Credit	Debit

According to the table above, asset and expense accounts have always a debit balance, while liabilities, equity and revenue accounts always have a credit balance. This is the basic rule for recording transactions in a journal of an entity: whenever the balance of an account with a debit balance increases, the amount must be **debited** and when it decreases, the account must be **credited**. Likewise, whenever the balance of an account with a credit balance increases, the amount must be **credited** and when it decreases, the account must be **debited**. These are known as the 'Modern Rules of Debit and Credit'.

The owners' dividends or drawings account also has a debit balance.

3.2.1 Journal Entries

Journal entry is the way through which accountants record every transaction that is performed by a business on a daily basis. It uses information sources such as invoices, vouchers, etc., to extract the information to be recorded in the journal. Journal entries must always follow the principle of the Modern Equation on debit and credit.

Examples of sources of transactions:

- a) Paid rent - \$5,000
- b) Paid salary - \$10,000
- c) Cash withdrawal for personal use - \$50,000
- d) Paid income tax \$70,000
- e) Commission received - \$25,000
- f) Commission paid - \$10,000

- g) Purchased computer through cheque - \$20,000
- h) Purchased goods for cash - \$50,000
- i) Sold goods for cash - \$100,000
- j) Depreciation on machinery @10% on \$5,000,000

As example of a journal entry using the above transactions is shown in **Annex A**.

The transactions shown in Annex A are fairly simple and can be recorded easily. However, some transactions can be more complex and harder to record. This is the case of (i) pre-paid expenses, (ii) outstanding expenses, (iii) accrued income, or (iv) income received in advance.

According to the accrual concept, the effects of transactions and other events are recognized on 'mercantile basis', i.e., when they occur (and not when cash is received or paid. Accrual means recognition of revenue or cost as and when they are earned or incurred, and not when money is received or paid.

In other words, when a business issues an invoice to a client, that transaction is recognized as an income irrespective of whether that client has paid or not that particular invoice.

Outstanding expenses are those expenses which are due in the current accounting period, but which are left unpaid for some reason. (Example: Salaries and wages, rent, interest on loans, etc.).

3.2.2 The Ledger

Ledger is a book in which a set of ledger accounts are grouped together. Ledger accounts are also known as T-accounts, therefore, a ledger account is a T-shaped account that is contained in the ledger book.

Examples:

<u>Car account</u>		<u>Furniture account</u>		<u>Rent account</u>	
Dr	Cr	Dr	Cr	Dr	Cr

Annex B shows an example of a format in which a ledger account can be prepared/presented.

What is the purpose of a Ledger Account?

It summarizes all individual transactions listed in the books¹⁰ of prime entry, which could be journals or subsidiary books¹¹, generating one figure of each account which is subsequently taken into the trial balance.

Data information from a source document is **recorded** into a Journal and the process of transferring the debit and the credit balance figures from a journal into a ledger is known as '**posting**'.

There are five types of Ledger Accounts, namely:

1. Asset Account
2. Expense Account
3. Liability Account
4. Capital/Equity Account
5. Revenue Account

Annex C shows a sample representation of both debit balance and credit balance ledger accounts.

¹⁰ Book = Ledger

¹¹ Subsidiary books are books used to record details for specific general ledger account.

How to Balance Ledger Accounts?

Dr Cash account		Cr Creditor's account	
+		-	
\$	1,000.00	\$	1,000.00 +
\$	500.00	\$	600.00
\$	600.00	\$	400.00
	\$ 400.00		
	\$ 600.00	* <td style="text-align: right;">\$ 1,200.00</td>	\$ 1,200.00
	\$ 1,100.00		
	* By balance c/d		
	2,100.00	1,600.00	1,600.00

3.2.3 The Trial Balance

A trial balance (TB) is a report that lists the balances of all General Ledger (GL) accounts of a company at a certain point in time, usually at year-end. The TB is a report but it is not a financial statement.

The purposes of the trial balance are:

- (i) to establish arithmetical accuracy of the books;
- (ii) to provide a basis for preparation of the financial statements;
- (iii) to summarize the ledger accounts.

How is the TB prepared?

To prepare a TB, the following steps must be followed:

- a) All ledger accounts must have been balanced;
- b) The closing balances of each ledger account are transferred to the appropriate debit or credit columns of the TB;
- c) All the amounts of debit and credit columns are summed. Both sums must be equal for the TB to be closed. In cases the sums do not match, it is the accountant's job to go a few steps back to locate and correct the error(s).

Annex D shows a typical example of a Trial Balance.

As each DEBIT amount must have an equal CREDIT amount, according to the double-entry principle, the total debit balance must be equal to the total credit balance.

A TB can be prepared using the following methods:

- (i) *Total Method* – whereby, the sum of debit and the sum of credit are inputted (but not balanced) into the TB;
- (ii) *Balance Method* – whereby the closing balance from the ledger account is inputted into the TB. This is the method most widely used by companies.
- (iii) *Total and Balance Method* – which is a combination of both methods described above.

3.2.4 Suspense Account

In certain occasions, it happens that after transferring all the balances from the ledger accounts, the debit and the credit balances do not match, for whatever reason, and the accountants are unable to locate and rectify the causing error(s)¹² within the available timeframe. In these cases, the TB is balanced or tallied by way of transferring the difference of debit and credit sides into an account known as 'Suspense Account'. A suspense account is, therefore, a temporary account where unclassified transactions and discrepancies of the TB ($Dr \neq Cr$) are recorded, and it acts as a 'holding' account until the unknown transaction(s) is/are identified and the entry errors are discovered and corrected.

The following types of errors can lead to the creation of a suspense account:

- (i) *Errors of omission* – These happen when the bookkeeper forgets to do a recording. Errors of omission can be subdivided into two types: (i) Complete omission, when no transaction is recorded into the journal. In these cases, the trial balance will tally ($Dr = Cr$); or (ii) Partial omission,

¹² Errors are unintentional mistakes which happen naturally during the process of accounting.

when a transaction is recorded into a journal or subsidiary book, but is not posted into the ledger. In these cases, the TB will not agree ($Dr \neq Cr$)

- (ii) *Errors of Principle* – These occur when accounting principles are contradicted or not followed properly. A typical example would be to confuse a debit balance account with a credit balance account. In such cases, the TB will anyway tally ($Dr = Cr$).
- (iii) *Errors of commission* – These errors occur when a wrong account is posted in the ledger. Typically, when a wrong amount is posted into the ledger, or an amount is posted on the wrong side of a T-account or even when an account is incorrectly balanced, these errors occur. Consequently, the TB will not agree ($Dr \neq Cr$).
- (iv) *Compensation errors* – These errors occur when one error cancels the effect(s) of another error. When such errors occur, the TB will not detect, i.e., it will tally ($Dr = Cr$).

If the suspense account is an asset, then it will have a debit balance, whereas, if it is a liability, it will have a credit balance. To clear a suspense account, it must have a 'zero' balance.

3.2.5 Adjusted Trial Balance

An adjusted trial balance is expected to:

- list of all balances of ledger accounts after preparation of adjusting entries;
- ensure arithmetical accuracy of the accounts after making the adjustment entries;
- contain balances of assets, liabilities, equity, revenue and expenses;

An adjusted trial balance is the primary source for the preparation of financial statements.

An example of an Adjusted TB is shown in **Annex E**.

4. Financial Statements

4.1 Concept of Financial Statements

In 1494, Luca Paccioli announced the fundamental accounting equation (Assets = Liabilities + Equity) which is also known as the Balance Sheet Equation. According to this equation, whatever a business owns or controls is always equal to whatever it owes to both outsiders (liabilities) or to the owners (equity).

The accounting equation can be expanded to the following format:

Asset = Liabilities + Contributed capital + Beginning retained earnings + Revenue - Expenses - Dividends

Where:

- Contributed capital = **Share Capital**
- Beginning retained earnings, Revenue, Expenses and Dividends = **Retained Earnings**
- Share Capital and Retained Earnings = **Equity**.

The most used financial statements are the following:

- (i) Income Statement
- (ii) Owners' Equity Statement
- (iii) Balance Sheet
- (iv) Cash Flow Statement.

4.2 The Income Statement

The Income Statement is the first step in the preparation of financial statements. It determines the net income of a company in a given period of time, showing all income and expenses accounts balances.

Example of an Income Statement:

Deltag Limited	
Income Statement	
For the Year Ending 31 December 2021	
Revenues	
Service Revenue	\$ 34,000.00
Rent Revenue	\$ 12,900.00
Total Revenue	\$ 46,900.00
Expenses	
Salaries and Wages Expense	\$ 16,200.00
Supplies Expense	\$ 1,300.00
Rent Expense	\$ 13,000.00
Insurance Expense	\$ 1,500.00
Depreciation Expense	\$ 500.00
Total Expenses	\$ 32,500.00
Net Income	\$ 14,400.00

4.3 Owners' Equity Statement

Owners' Equity Statement

The owners' equity statement determines the closing balance of the owners' equity. It is prepared by using owners' capital and drawings accounts, and the net income (or net loss).

Example of an Owners' Equity Statement:

Deltag Limited	
Owner's Equity Statement	
For the Year Ending 31 December 2021	
Owner's Capital, Year 1	\$ 16,000.00
Net Income	\$ 14,400.00
Owner's Capital, Year 2	\$ 30,400.00

4.4 The Balance Sheet

The Balance sheet reflects the financial position of a business at a given moment in time (not a period!), and it is prepared by using asset and liability accounts and the ending owners' capital balance, as reported in the Owners' Equity Statement.

Example of a BS:

Deltag Limited	
Balance Sheet	
As at 31 December 2021	
Assets	
Cash	\$ 11,000.00
Supplies	\$ 12,500.00
Accounts Receivable	\$ 1,200.00
Prepaid Insurance	\$ 3,000.00
Equipment	\$ 15,000.00
Accumulated Depreciation - Equipment	\$ (4,000.00)
	\$ 38,700.00
Liabilities and Owner's Equity	
Liabilities	
Accounts Payable	\$ 6,000.00
Salaries and Wages Payable	\$ 1,200.00
Unearned rent Revenue	\$ 1,100.00
Total Liabilities	\$ 8,300.00
Owner' Equity	
Owner's Capital	\$ 30,400.00
	\$ 38,700.00

4.5 Cash Flow Statement

The CF Statement summarizes all the information about inflows (or receipts) or outflows (or payments) of cash for a specified period of time. This statement draws information directly from the cash ledger, not from the adjusted trial balance like the other statements.

A sample format of a Cash Flow Statement is shown in **Annex F**.

Annex G summarizes the financial statements and the relationships among them.

5. Key Financial Ratios

To understand the actual meaning of Financial Statements, one needs to analyze each one of them. This analysis seeks to clarify concerns that may be raised by the person analyzing the Financial Statements. A creditor, for instance, seeks to clarify why a business needs to borrow funds, how its original capital is/was structured, and from where it sources the funds it intends to repay the debt with. A creditor/investor

needs to know how the business has been performing in the past, and what is its potential future outlook. He/she wants also to assess the amount of risk involved in the operation.

The management of a company analyze financial statements also in search for answers to questions likely to be raised by creditors/investors. The management need to evaluate their business' robustness, through some sort of a SWOT analysis, to establish the business's strategic position and design plans and policies to be presented to all its stakeholders, namely, employees, regulators, the press and general public, about the business.

There are five main groups of financial ratios that can be used to analyze and interpret financial statements:

- Liquidity Ratios
- Activity Ratios
- Leverage Ratios
- Profitability Ratios
- Market Ratios.

5.1 Liquidity Ratios

Liquidity ratios measure the company's short-term solvency or its ability to meet its cash flow needs. Examples:

- a) Current ratio = Current assets / Current liabilities
- b) Acid-Test Ratio = (Current assets – Inventory) / Current liabilities
- c) Cash Flow Liquidity Ratio = (Cash and cash liquidities + Marketable securities + CFO¹³) / Current liabilities
- d) Average Collection Period = Net account receivable / Average daily sales

¹³ CFO means 'Cash Flow from Operating Activities'.

5.2 Activity Ratios

Activity ratios measure the liquidity of specific assets and the efficiency of managing assets. Examples:

- a) Accounts Receivable Turnover = Net sales / Net accounts receivable
- b) Inventory Turnover = Cost of goods sold / Inventory
- c) Account Payable Turnover = Cost of goods sold / Accounts payable
- d) Fixed Assets Turnover = Net sales / Total assets

5.3 Leverage Ratios

Leverage ratios measure the extent of a business's financing with debt relative to equity, and its ability to cover interest and other fixed charges. Examples:

- a) Debt Ratio = Total liabilities / Total assets
- b) Long-term Debt to Total Capitalization = Long-term debt / Long-term debt + Stockholders' equity
- c) Times Interest Earned = Operating profit / interest expense
- d) Cash Interest Coverage = CFO + Interest paid + Taxes paid / Interest paid
- e) Fixed Charge Coverage = Operating profit + Rent expense / Interest expense + Rent expense
- f) Cash Flow Adequacy = Cash flow from operating activities / Capital expenditure + Debt repayments + Dividends paid

5.4 Profitability Ratios

Profitability ratios measure the overall performance of a business and its efficiency in managing assets, liability and equity. Examples:

- a) Gross Profit Margin = Gross profit / Net sales
- b) Operating Profit Margin = Operating profit / Net sales
- c) Net Profit Margin = Net earnings / Net sales
- d) Cash Flow Margin = Cash flow from operating activities / Net sales
- e) Return on Total Assets (ROA) or Return on Investment (ROI) = Net earnings / Total assets
- f) Return on Equity (ROE) = Net earnings / Stockholders' equity

5.5 Market Ratios

Market ratios measure returns to stockholders and the value the marketplace attaches to a business' stock. Examples:

- a) Earnings per Common Share = Net earnings / Average shares outstanding
- b) Price-to-Earning (P/E) = Market price of common stock / Earnings per share
- c) Dividend Payout = Dividends per share / Earnings per share
- d) Dividends Yield = Dividends per share / Market price of common stock

Annex H summarizes how to use financial ratios and the relationships thereof.

6. Internal Accounting Control System

One of the responsibilities of business managers is to adopt and implement internal policies and procedures aimed at controlling the business' performance by way of achieving the following objectives:

- (i) Promoting operational efficiency;
- (ii) Ensuring accuracy of accounting information;
- (iii) Encouraging all company staff to continuously comply with applicable laws and regulations.

The implementation of internal accounting control systems is a statutory requirement that aims to minimizing the risk of theft, fraud, corrupt acts, etc. Also, Internal control mechanisms ensure staff accountability in the performance of assigned tasks for whatever errors that may occur during the process.

The principle of '**separation of duties**' in the performance of incompatible acts is one way of internal control. It requires that the roles of approving, executing, keeping custody and recording of accounting transactions are assigned to different persons or entities at any given time. In cases when full segregation of duties is not possible (in small businesses, for instance), other simpler control mechanisms, such as oversight in presence by owners or staff mandatory vacation, may be applied.

Traceability of acts/actions in accounting through documentation control is critical, as it helps to pinpoint responsibility holders when problems occur. It is, therefore, a fundamental role of accounting the maintenance of adequate documentation filing, whether physically or electronically. One of the techniques used for this purpose consists of pre-numbering all the documents in a sequenced order.

The access to accounting documentation and information needs to be limited to a controlled number of authorized personnel, as part of the documentation/information physical integrity control process.

Internal and external auditing activities are the last line of the defense in the process of implementing internal financial control mechanisms in a company.

7. Short-Term Decision-Making Process

Short-term decisions are the kind of *ad-hoc* unplanned decisions that business managers are, from time-to-time, required to take within very limited timeframes. Some of these decisions, whether taken or not, have the potential to affect the long-term future of a particular business.

In dealing with short-term decision making, the “one-shoe-fits-all” principle is not appropriate, as each problem to be decided upon tends to be unique, based on the specific environmental conditions that have caused it.

Some of the techniques/models to help managers take critical short-term decisions include (i) Cost-Volume-Profit (CVP) analysis, (ii) Sensitivity analysis, and (iii) Relevant variable analysis.

- *Cost-Volume-Profit (CVP) Analysis* verifies to what extent costs, revenues and profit react in response to changes in the volumes of goods sold or services rendered to the market. This analysis is performed by determining the following elements:
 - a) Break-even point¹⁴;

¹⁴ Break-even point is the point at which the volumes of the sales made by a business make no profit nor loss (Profit = zero).

b) Target Profit Levels (before and after taxes).

- *Sensitivity Analysis* is done by changing the main variables in the CVP analysis (maintaining the key assumptions), to determine how sensitive the CVP relationships are in reaction to these variable changed. The variables to be changed in this context include:
 - a) Selling price;
 - b) Variable cost;
 - c) Fixed cost;
 - d) Tax rate.
- *Relevant Variable Analysis*. According to this analysis, the following statements are to be considered:
 - a) Sunk costs¹⁵ are never relevant;
 - b) Opportunity costs are always relevant;
 - c) Incremental costs and revenues may be relevant.

The analysis process consists of three stages, namely (i) identifying the possible alternative, (ii) determining the relevant revenues, costs and/or profits of each alternative, and (iii) choosing the best alternative.

Other forms of short-term decisions mechanisms include *Special Order Decisions* (whether to accept or reject an order from a customer), the *Outsourcing Decision* (whether to make something in-house or buy it from outside), and the *Product-mix Decision* (whether to keep a product on or drop it from the mix).

8 Key Learnings

Over the last 10 years or so, I have held professional positions (including positions in the boards of directors of a bank and a couple of other corporations) that led me to participate in taking decisions based on critical financial information presented by

¹⁵ Past costs.

accounting professionals. My academic background, at high school or university, never included Accounting as a core subject.

In this context, you may understand that the figures in financial statements or financial ratios that were presented to the members of the board of directors for discussion made little or no sense to me, most of the times. Honestly, I never had a clear clue of how a figure taken from an accounting transaction (an invoice, for instance), travelled all the way through an accounting journal, a ledger, a trial balance, financial statements, until it lands in front of me, as a financial ratio, upon which I had to make a decision.

This course is the first that has ever clarified that picture to me.

The logic of the double-entry bookkeeping has always been too confusing for me to understand, until I completed this course. Today, I am better informed about what it means to debit or credit an account, about why accounts need to be balanced and how that is achieved. Today, after completing this course, I clearly understand the whole logic behind these processes.

Today I am better prepared to 'dig' behind the numbers presented to me by an accountant working for my personal small business, and question them more confidently. Most of the decisions that I used to take, resorting to an imaginary 'crystal ball' will now be taken with better informed grounds, going forward, after completing this course.

9. Conclusion

Accounting knowledge is fundamental to almost everyone, particularly to a business manager or an entrepreneur. Managing a business without a clear sight of the business' accounting/financial performance is like walking in the dark: all risks are possible and eminent.

This does not mean that everyone needs to be an accountant. Accountancy is a very complex profession that takes many years of practice for a professional to master it. It just means that most of us, if not all, need to have some basic understanding of how

we source, spend or invest our funds, and how we can keep track of the processes involved.

As business managers, we are accountable for the funds that our shareholders entrust us to manage and it is our responsibility to guard those funds and generate revenue and profits for them. We need to, at all times, be able to assess the performance of the businesses we are running, by way of constantly interpreting the key accounting figures of those businesses. To achieve this goal, we need to have some knowledge of accounting.

Likewise, as entrepreneurs, we are responsible for the correct management of our own funds that we invest in the business, as well as for the funds entrusted to us by or investors or creditors. To ensure that our entrepreneurial projects are successful, we need to be able to guard, invest and generate profits from the resources at our hands. For that purpose too, we need to have some knowledge of accounting and finances.

This is the relevance for me of this course that I have just completed.

THE END

10. Bibliography

- ANSWORTH, Penne and DEINES, Dan: "Introduction to Accounting: An Integrated Approach", 6th Edition, McGraw-Hill, New York, USA, 2011
- BOSUA, Willem and SCHUTTE, Madri: "Basic Financial Accounting", 4th Edition, JUTA and Company (Pty) Ltd, Cape Town, South Africa, 2015.
- FIELDS, Eduard: "The Essentials of Finance and Accounting for Nonfinancial Managers", 3rd Edition, AMACOM (American Management Association), New York, USA, 2016
- FRASER, Lyn M., and ORMISTON, Aileen: "Understanding Financial Statements", 10th Edition, Pearson Education Inc., USA, 2013
- FRIDSON, Martin and ALVAREZ, Fernando: "Financial Statements Analysis: A Practitioner's Guide", 3rd Edition, John Wiley & Sons, Inc., USA, 2002
- GRIFFIN, Michael P.: "MBA Fundamentals: Accounting and Finance", Kaplan Publishing, 1 Liberty Plaza, 24th Floor, New York, NY 10006, USA, 2009
- HERMANSON, Roger H, EDWARDS, James Don, and MAHEL, Michael W.: "Accounting Principles: A Business Perspective, Financial Accounting (Chapters 1-8)", Open College Textbook, Irwin/McGraw-Hill, USA, 2011
- MURRAY, George R. and MURRAY, Kathleen: "Accounting at Your Fingertips", 2nd Edition, Alpha, Penguin Group (USA) Inc., USA, 2012
- NOBLES, Tracie L., SCOTT, Cathy J., McQuaig, Douglas J., and BILLE, Patricia A.: "College Accounting", 11th Edition, South-Western Cengage Learning, USA, 2013
- RICE, Anthony: "Accounts Demystified: The Astonishingly Simple Guide to Accounting", 5th Edition, Pearson Education Limited, England, 2008
- SUBRAMANYAM, K. R.: "Financial Statements Analysis", 11th Edition, McGraw-Hill Education, 2 Penn Plaza, New York, NY 10121, USA, 2014
- WEYGANDT, Jerry J., KIMMEL, Paul D., and KIESO, Donald E.: "Financial Accounting", 9th Edition, John Wiley & Sons, Inc., USA, 2014
- WOOD, Frank and HORNER, David: "Business Accounting Basics", Financial Times Prentice Hall, Pearson Education Limited, England, 2010

ANNEX A

Example of the Journal Entry:

#	DATE	PARTICULARS	BALANCE	JF	DEBIT (DR)	CREDIT (CR)
1	1-Apr-22	Rent account	Dr		\$ 5,000.00	
		to cash account				\$ 5,000.00
2	1-Apr-22	Salary account	Dr		\$ 10,000.00	
		to cash account				\$ 10,000.00
3	4-Apr-22	Drawing's account	Dr		\$ 50,000.00	
		to cash account				\$ 50,000.00
4	4-Apr-22	Income tax account	Dr		\$ 70,000.00	
		to cash account				\$ 70,000.00
5	5-Apr-22	Cash account	Dr		\$ 25,000.00	
		to commissions account				\$ 25,000.00
6	6-Apr-22	Commission paid account	Dr		\$ 10,000.00	
		to cash account				\$ 10,000.00
7	8-Apr-22	Computer account	Dr		\$ 20,000.00	
		to bank account				\$ 20,000.00
8	11-Apr-22	Purchases account	Dr		\$ 50,000.00	
		to cash account				\$ 50,000.00
9	13-Apr-22	Cash account	Dr		\$ 100,000.00	
		to sales account				\$ 100,000.00
10	15-Apr-22	Depreciation account	Dr		\$ 50,000.00	
		to machinery account				\$ 50,000.00

ANNEX B

Format of a Ledger Account:

LEDGER ACCOUNT							
Dr				Cr			
DATE	PARTICULARS	JF	AMOUNT	DATE	PARTICULARS	JF	AMOUNT

Debit side

Credit side

ANNEX C

Ledger Account Format:

DEBIT BALANCE SIDE		CREDIT BALANCE SIDE																																																																									
Dr		Cr		Cr																																																																							
Asset account		account		Rent account																																																																							
<table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 50%; border-right: 1px solid black;">+</td> <td style="width: 50%; text-align: right;">-</td> </tr> <tr> <td style="border-right: 1px solid black;">To balance b/d ¹⁶</td> <td></td> </tr> <tr> <td style="border-right: 1px solid black;">(Opening balance)</td> <td></td> </tr> <tr> <td style="border-right: 1px solid black;">\$</td> <td></td> </tr> <tr> <td style="border-right: 1px solid black;">-</td> <td></td> </tr> <tr> <td style="border-right: 1px solid black;"></td> <td style="text-align: right;">By balance c/d¹⁷</td> </tr> <tr> <td style="border-right: 1px solid black;"></td> <td style="text-align: right;">(Closing balance)</td> </tr> <tr> <td style="border-right: 1px solid black;"></td> <td style="text-align: right;">-</td> </tr> <tr> <td style="border-right: 1px solid black;"></td> <td style="text-align: right;">-</td> </tr> </table>	+	-	To balance b/d ¹⁶		(Opening balance)		\$		-			By balance c/d ¹⁷		(Closing balance)		-		-	<table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 50%; border-right: 1px solid black;">-</td> <td style="width: 50%; text-align: right;">+</td> </tr> <tr> <td style="border-right: 1px solid black;"></td> <td style="text-align: right;">To balance b/d</td> </tr> <tr> <td style="border-right: 1px solid black;"></td> <td style="text-align: right;">(Opening balance)</td> </tr> <tr> <td style="border-right: 1px solid black;"></td> <td style="text-align: right;">-</td> </tr> <tr> <td style="border-right: 1px solid black;"></td> <td style="text-align: right;">-</td> </tr> <tr> <td style="border-right: 1px solid black;"></td> <td style="text-align: right;">By balance c/d</td> </tr> <tr> <td style="border-right: 1px solid black;"></td> <td style="text-align: right;">(Closing balance)</td> </tr> <tr> <td style="border-right: 1px solid black;"></td> <td style="text-align: right;">-</td> </tr> <tr> <td style="border-right: 1px solid black;"></td> <td style="text-align: right;">-</td> </tr> </table>	-	+		To balance b/d		(Opening balance)		-		-		By balance c/d		(Closing balance)		-		-	<table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 50%; border-right: 1px solid black;">-</td> <td style="width: 50%; text-align: right;">+</td> </tr> <tr> <td style="border-right: 1px solid black;"></td> <td style="text-align: right;">To balance b/d</td> </tr> <tr> <td style="border-right: 1px solid black;"></td> <td style="text-align: right;">(Opening balance)</td> </tr> <tr> <td style="border-right: 1px solid black;"></td> <td style="text-align: right;">-</td> </tr> <tr> <td style="border-right: 1px solid black;"></td> <td style="text-align: right;">-</td> </tr> <tr> <td style="border-right: 1px solid black;"></td> <td style="text-align: right;">By balance c/d</td> </tr> <tr> <td style="border-right: 1px solid black;"></td> <td style="text-align: right;">(Closing balance)</td> </tr> <tr> <td style="border-right: 1px solid black;"></td> <td style="text-align: right;">-</td> </tr> <tr> <td style="border-right: 1px solid black;"></td> <td style="text-align: right;">-</td> </tr> </table>	-	+		To balance b/d		(Opening balance)		-		-		By balance c/d		(Closing balance)		-		-	<table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 50%; border-right: 1px solid black;">-</td> <td style="width: 50%; text-align: right;">+</td> </tr> <tr> <td style="border-right: 1px solid black;"></td> <td style="text-align: right;">To balance b/d</td> </tr> <tr> <td style="border-right: 1px solid black;"></td> <td style="text-align: right;">(Opening balance)</td> </tr> <tr> <td style="border-right: 1px solid black;"></td> <td style="text-align: right;">-</td> </tr> <tr> <td style="border-right: 1px solid black;"></td> <td style="text-align: right;">-</td> </tr> <tr> <td style="border-right: 1px solid black;"></td> <td style="text-align: right;">By balance c/d</td> </tr> <tr> <td style="border-right: 1px solid black;"></td> <td style="text-align: right;">(Closing balance)</td> </tr> <tr> <td style="border-right: 1px solid black;"></td> <td style="text-align: right;">-</td> </tr> <tr> <td style="border-right: 1px solid black;"></td> <td style="text-align: right;">-</td> </tr> </table>	-	+		To balance b/d		(Opening balance)		-		-		By balance c/d		(Closing balance)		-		-
+	-																																																																										
To balance b/d ¹⁶																																																																											
(Opening balance)																																																																											
\$																																																																											
-																																																																											
	By balance c/d ¹⁷																																																																										
	(Closing balance)																																																																										
	-																																																																										
	-																																																																										
-	+																																																																										
	To balance b/d																																																																										
	(Opening balance)																																																																										
	-																																																																										
	-																																																																										
	By balance c/d																																																																										
	(Closing balance)																																																																										
	-																																																																										
	-																																																																										
-	+																																																																										
	To balance b/d																																																																										
	(Opening balance)																																																																										
	-																																																																										
	-																																																																										
	By balance c/d																																																																										
	(Closing balance)																																																																										
	-																																																																										
	-																																																																										
-	+																																																																										
	To balance b/d																																																																										
	(Opening balance)																																																																										
	-																																																																										
	-																																																																										
	By balance c/d																																																																										
	(Closing balance)																																																																										
	-																																																																										
	-																																																																										
-	-	-	-	-	-																																																																						
-	-	-	-	-	-																																																																						

¹⁶ 'b/d' stands for 'brought down'.

¹⁷ 'c/d' stands for 'carried down or forward'.

ANNEX D

Trial Balance format:

Trial Balance as at 31 December 2021

S. Nr	LEDGER ACCOUNT	LF	DEBIT	CREDIT
1	Cash Account		XXXX	
2	Salary Account		XXXX	
3	Capital/Equity Account			XXXX
4	Bank Loan Account			XXXX
	TOTAL BALANCE		YYYY	YYYY

ANNEX E

**Deltag Limited
Trial Balance**

For the Year Ending 31 December 2021

#	LEDGER ACCOUNT	LF	DEBIT	CREDIT
	Cash		\$ 11,000.00	
	Supplies		\$ 12,500.00	
	Accounts Receivable		\$ 1,200.00	
	Prepaid Insurance		\$ 3,000.00	
	Equipment		\$ 15,000.00	
	Accumulated Depreciation - Equipment			\$ 4,000.00
	Accounts Payable			\$ 6,000.00
	Salaries and Wages Payable			\$ 1,200.00
	Unearned Rent Revenue			\$ 1,100.00
	Owner's Capital			\$ 16,000.00
	Service Revenue			\$ 34,000.00
	Rent Revenue			\$ 12,900.00
	Salaries and Wages Expense		\$ 16,200.00	
	Supplies Expense		\$ 1,300.00	
	Rent Expense		\$ 13,000.00	
	Insurance Expense		\$ 1,500.00	
	Depreciation Expense		\$ 500.00	
			\$ 75,200.00	\$ 75,200.00

ANNEX F

Sample Cash Flow Statement format

Deltag Limited
Cash Flow Statement
For the Year Ending 31 December 2021

1	Cash Flow from Operating Activities	
	ABC	Amount
	Net Cash Flow from Operating Activities	Sum amount A
2	Cash Flow fro Investment Activities	
	ABC	Amount
	Net Cash Flow from Investment Activities	Sum amount B
3	Cash Flow from Financing Activities	
	ABC	Amount
	Net Cash Flow from Financing Activities	Sum amount C
	Net Change in Cash	A + B + C
	Beginning Cash	X
	Ending Cash	A + B + C + X

ANNEX G

Relationship of Financial Statements

Income Statement

Sales
Less: Cost of sales
Gross margin
Less selling and administrative expenses
Net income

Statement of Shareholders' Equity (Retained earnings portion)

Beginning balance of retained earnings
Add: Net income
Less dividends declared
Ending balance of retained earnings

Statement of Cash Flows

Net cash provided/used by operating activities
Net cash provided/used by investing activities
Net cash provided/used by financing activities
Net change in cash
Add: Beginning balance in cash
Ending balance in cash

Balance Sheet

Assets
Cash
Other current assets
Long-term assets
Total Assets

Liabilities and Shareholders' Equity
Current liabilities
Long-term liabilities
Shareholders' capital
Retained earnings
Total liabilities and shareholders' capital

Source: Ainsworth & Deines, pp. 23

ANNEX H

How to Relate and Use Financial Ratios

