

“Special Topics in Accounting”.**: The Business Environment****Topic Objective:**

At the end of this topic student would be able to:

- Understand the concept and pattern of world trade
- Learn about balance of payments
- Learn about regionalism
- Understand the concept of international financial market

Definition/Overview:

Business Environment: Business environment is a set of political, economic, social and technological (PEST) forces that are largely outside the control and influence of a business and that can potentially have both a positive and a negative impact on the business.

Key Points:**1. World trade**

Economic progress is linked to world trade and those who preach trade restrictions are denying this fact. Countries like the old communist bloc (Russia, East Germany, etc.) have not developed as fast as those with more outward orientation. The same can be said of African nations, where the inability to industrialise and export in volume has locked them into, generally and primary product producers. Economic Structural Adjustment Programmes (ESAP) are supposed to remedy this situation by giving "command economies" a market oriented focus.

Another argument concerns whether marketing has relevance to the process of economic development. Less developed countries (LDCs) have traditionally focused on production and

domestic income generation. Also, marketing addresses it to needs and wants and it could be argued that where LDCs' productive capabilities are far less than unsatisfied needs and wants, then marketing is superfluous. However, adopting "marketing" could lead to the more efficient and effective use of productive and marketing resources and it may be able to focus on current needs and find better solutions. For example, techniques developed in the West for optimising transport resources could well be transferred to effect. Similarly, adopting new methods of marketing may give better results. A good example is the Cold Storage Company of Zimbabwe (CSC). By changing from the current system of marketing cattle (the CSC takes in cattle, at fixed prices and slaughters) to an auction system by description, all actors in the system could benefit. Decisions in product, price, communications and merchandising can stimulate economic development. Changing from fixed price systems to market based pricing could lead to the faster achievement of development objectives (for example "higher incomes"). In current drought conditions in Africa, governments could well benefit from advertising other forms of nutritious food, for example, fish, rather than let the populace be left uninformed and disgruntled about the lack of maize.

2. Composition of world trade

Agriculture, minerals, fuels and manufactured goods figure most in world trade. However shifts are occurring.

Product	1980	1985%	1988%
Agriculture	22.5	1	14
Minerals	14	-5	14
Fuel	41	-3.5	1
Manufactures	17	4.5	1

Table 1: Shift in commodity trade - % of world trade

Interestingly enough, those economies which have divested themselves of agriculture (or made it more efficient) and invested in manufacturing are those which have shown spectacular growth.

Table 2 compares Zimbabwe with Thailand.

3. Patterns of trade

Most industrialized nations trade with each other. This had led to their continued domination. Particularly the USA, Western Europe and Japan which between them have 66% of world GNP and trade. In 1985 industrialised trade to other industrialised countries accounted for 47% of trade, next came developing countries to industrialised (15%), and finally industrialised to developing countries (13%). Political influences can also be seen between trading partners, for example Zimbabwe's trade with China. Marketers need to identify trading patterns between nations and product trading patterns. East-West trade and West to the former communist bloc is likely to grow at the expense of North-South trade.

Country	Distribution of GDP %									
	GDP \$ m		Agriculture		Industry		Manufacturing		Services	
	1970	1992	1970	1992	1970	1992	1970	1992	1970	1992
Zimbabwe	1415	5350	15	22	36	35	21	30	49	43
Thailand	7087	110337	26	12	25	39	16	28	49	49

Table 1: Structure of production

This pattern is repeated throughout Africa and Asia in general.

4. Balance of payments

This is the measure of all economic transactions between one nation and another. The balance of payments is made up of the current account, showing trade in goods and services; and the capital account, which shows financial transactions. In 1989, after official transfers, the USA had a US\$ 109,242 million deficit on its current account, Japan had a \$ 131,400 million surplus, Tanzania a \$ 778,5 million deficit and Zimbabwe a \$ 2,783 million deficit.

The balance of payments account helps marketers select the location of supply for foreign markets and the selection of markets. The capital account may show the nations which have control restrictions and hence be difficult to deal with. In this regard, African nations are generally disadvantaged.

4.1. Government policy

This refers to the government measures and regulations which have a bearing on trade - tariffs, quotas, exchange controls and invisible tariffs. These can cause formidable barriers to marketers and will be dealt with at length later.

4.2. World Institutions

Institutions like GATT and the United Nations Conference on Trade and Development (UNCTAD) have been of help to countries in their development. GATT had over 120 members and associated and accounted for 80% of world trade. Its intention was to create a general system of preferences and negotiate tariffs for members' products on a nondiscriminant basis and provide a forum for consultation. The Kennedy Round of the 1960s was superseded by the Tokyo round of the 1970s and that by the current Uruguay round signed in 1994.

UNCTAD furthers the development of emerging nations. It seeks to improve the prices of primary goods exports through commodity agreements. It also established a tariff preference system favouring developing nations.

5. Regionalism

Regionalism is a major and important trade development. Some regional groupings have either market (EU) or command (China) or mixed economies (former communist countries and The Preferential Trade Area (PTA) and The Southern African Development Community (SADC). With these developments, free trade zones have occurred (all internal barriers abolished) economic unions (the EU), export pricing zones (Mauritius) and other schemes. The major regional economic organisations are: Acuerdo de Cartagena (Andean Group), Association of South East Nations (ASEAN), Asian Pacific Rim countries (APC), Caribbean Community and Common Market (CARICOM), Central American Common Market (Mercado Comn Centro Americano), Council of Arab Economic Unity, Economic Community of West African States (ECOWAS), the European Union (EU), Latin American Integration Association, Organisation Commune Africane et Mauricienne, Preferential Trade Area (PTA) and the Southern African Development Conference (SADC). A principal collapse has been the Council for Economic Assistance (COMECON) with the disappearance of the communist bloc in Eastern Europe. Of

these blocs, the EU (reporting 33% of world trade) and EFTA are very important. To counteract the growing power of the EU, the USA and Canada have entered into an agreement with Mexico as a willing partner and created the North American Free Trade Agreement (NAFTA).

These blocs are of various form, power, influence and success. ASEAN is a collaboration of industry and agriculture, PTA in tariffs. SADC and PTA have had historically little impact but are now beginning to grow in importance in view of the normalization of South Africa. The EU, North American Union and the Pacific Rim Union will pose the greatest power blocs in future years. Many developing countries have entered into trading blocks as a reaction against loss of developed country markets or as a base to build economic integration and markets. The development of trading blocs can bring headaches and advantages to trade.

6. The international financial system

Global financing operations based on the gold standard gave rise to instability, so Bretton Woods, post World War II, saw the nascence of the International Monetary Fund (IMF) and

6.1. IMF and World Bank.

The IMF deals with the International Monetary System. Involved countries joined IMF to establish a par value for other countries in terms of the US dollar and maintain it with +/- one percent of that value. The system fell down because large corporations were holding more funds than banks and so a "float" set in. IMF began to fade somewhat. However it still lends, on a short term basis, to countries with payment problems to help them continue trading.

The World Bank, or International Bank for Reconstruction and Development (IBRD) deals with international capital. It provides long term capital to aid economic development. Currently it has about US\$ 22 billion annually for this operation. The role of the World Bank has often been criticised especially on its conditionality for loans to Africa in funding structural adjustment and trade liberalization programmes. However many developing countries require institutional funding to help them with trade and balance payment problems.

Other major lenders include the EU and bilateral donors and agencies who have provided money for developmental projects. A principal donor is the United States Agency for International Development (USAID).

6.2. The United States of America

Since the Gulf War of 1991, the USA has played an increasingly important role in the economic affairs of the world. Since that time, itself, and its agency USAID, have increasingly flexed their muscles. However, the balance of economic power in recent years, has shifted towards the Pacific rim, especially Japan and the Asian Tigers.

6.3. Individual economies

Whilst the global factors listed above have aided the development of a world economy, marketers must consider carefully individual economies. A study of these helps answer the questions - how big is the market and what is it like? Currently there are over 200 individual countries in the world. Different countries experience different population growth rates. In the early 90s, the UK had an annual growth rate of 0.1%, the Ivory Coast 6%, and Africa in general, 3% per annum. Low income countries and oil rich countries have the largest growth rates. Growth rates have a dual edge - they are good for sales but bad for world resources. The world population, currently standing at 5 billion is experiencing a rapid growth rate. It is expected to reach 7 billion by the end of the century. The strain on world resources is likely to be very large. The distribution of the population is also important. Different age groups have different needs and population density should mean good market potential, the higher the better. The Netherlands have 1000 persons per square mile, Bangladesh 1,791 but the USA only 65 persons per square mile. However, the USA spends more per capita than Bangladesh

b) Income: No one has yet been able to assess accurately the impact of the AIDS pandemic on world population and economic activity. South Africa estimates AIDS will cost South African industry R16.7 billion by the year 2000. Suffice to say, unless a cure or prevention is found, it could be serious, especially in Africa and South East Asia, the world's "hot spots".

Income is the most important variable affecting market potential. Markets are not markets without money to spend. Interestingly, there is an inverse correlation between GNP per capita and income elasticity of demand for food. Asia has a 0.9 income elasticity of demand and the USA 0.16. The distribution of income is very uneven. In Kenya the lowest 20% of the population receive less than 3% of national resource. This bimodal distribution of income means marketers must analyse two economies in a country. Per capita measures have therefore, many limitations. Per capita judges a country's level of economic development and its degree of modernisation and progress in health, education and welfare. Half of the world's population lives with an average per capita income of only US\$ 270. Per capita is usually reflected in US dollars and is only valid for comparison if exchange rates are equal. Exchange rates reflect international goods and services in a country but not domestic consumption.

Another limitation of per capita measures is the lack of comparability with the figures themselves. The US budget contains food, clothing and shelter. In many of the less developed nations these items may be largely self provided and therefore not reflected in national income tables. Also in the UK, snow equipment is included, and this is not, obviously, in Africa and parts of Asia. Other limitations are that sales of goods are not well correlated with per capita income and if there is great unevenness in income distribution, per capita figures are less meaningful. Product saturation can be equally troublesome in affecting market potential. A vacuum cleaner in the Netherlands has a 95% household penetration rate, but only 7% in Italy. Gross National Product is a better indicator of potential than Gross Domestic Product as GDP includes more than "product". World GNP figures reveal the concentration of wealth in the three nations, the USA, Japan and Western Europe. Africa trails far behind

Topic Objective:

At the end of this topic student would be able to:

- Define Accounting
- Learn about the basic concepts of accounting

Definition/Overview:

Accounting:: Accounting is the system of recording, verifying, and reporting of the value of assets, liabilities, income, and expenses in the books of account (ledger) to which debit and credit entries (recognizing transactions) are chronologically posted to record changes in value

Key Points:**1. Overview of Accounting**

Financial accounting is one branch of accounting and historically has involved processes by which financial information about a business is recorded, classified, summarised, interpreted, and communicated; for public companies, this information is generally publicly-accessible. By contrast management accounting information is used within an organization and is usually confidential and accessible only to a small group, mostly decision-makers. Open-book Accounting aims to improve accounting transparency. Tax Accounting is the accounting needed to comply with jurisdictional tax regulations. Accounting scholarship is the academic discipline which studies the theory of accountancy.

Practitioners of accountancy are known as accountants. Professional bodies for accountants allow their members to use titles indicating their membership or qualification level: Chartered Certified Accountant (ACCA or FCCA), Chartered Accountant (FCA, CA or ACA), International Accountant (FAIA or AAIA), Management Accountant (ACMA, FCMA or AICWA), Certified Public Accountant (CPA) and Certified General Accountant (CGA or FCGA).

The related, but separate financial audit comprises internal and external audit. External audit - carried out by independent auditors - examines the financial statements and accounting records

in order to express an opinion as to the truth and fairness and adherence to Generally Accepted Accounting Principles (GAAP), or International Financial Reporting Standards (IFRS). Internal audit aims at providing information for management usage, and is typically carried out by employees.

2. Basic Concepts in Accounting

Accounting is the language of business and it is used to communicate financial information. In order for that information to make sense, accounting is based on 12 fundamental concepts. These fundamental concepts then form the basis for all of the Generally Accepted Accounting Principles (GAAP). By using these concepts as the foundation, readers of financial statements and other accounting information do not need to make assumptions about what the numbers mean.

2.1. Entity

Accounts are kept for entities and not the people who own or run the company. Even in proprietorships and partnerships, the accounts for the business must be kept separate from those of the owner(s).

2.2. Money-Measurement

For an accounting record to be made it must be able to be expressed in monetary terms.

For this reason, financial statements show only a limited picture of the business.

Consider a situation where there is a labor strike pending or the business owners health is failing; these situations have a huge impact on the operations and financial security of the company but this information is not reflected in the financial statements.

2.3. Going Concern

Accounting assumes that an entity will continue to operate indefinitely. This concept implies that financial statements do not represent a company's worth if its assets were to be liquidated, but rather that the assets will be used in future operations. This concept

also allows businesses to spread (amortize) the cost of an asset over its expected useful life.

2.4. Cost

An asset (something that is owned by the company) is entered into the accounting records at the price paid to acquire it. Because the worth of an asset changes over time it would be impossible to accurately record the market value for the assets of a company. The cost concept does recognize that assets generally depreciate in value and so accounting practice removes the depreciation amount from the original cost, shows the value as a net amount, and records the difference as a cost of operations (depreciation expense.)

2.5. Dual Aspect

This concept is the basis of the fundamental accounting equation:

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

- Assets are what the company owns.
- Liabilities are what the company owes to creditors against those assets
- Equity is the difference between the two and represents what the company owes to its investors/owners.

All accounting transactions must keep this equation balanced so when there is an increase on one side there must be an equal increase on the other side or an equal decrease on the same side.

2.6. Objectivity

The objectivity concept states that accounting will be recorded on the basis of objective evidence (invoices, receipts, bank statement, etc). This means that accounting records will initiate from a source document and that the information recorded is based on fact and not personal opinion.

2.7. Time Period

This concept defines a specific interval of time for which an entity's reports are prepared. This can be a fiscal year (Mar 1 Feb 28), natural year (Jan 1 Dec 31), or any other meaningful period such as a quarter or a month.

2.8. Conservatism

This requires understating rather than overstating revenue (income) and expense amounts that have a degree of uncertainty. The rule is to recognize revenue when it is reasonably certain and recognize expenses as soon as they are reasonably possible. The reasons for accounting in this manner are so that financial statements do not overstate the company's financial position. Accounting chooses to err on the side of caution and protect investors from inflated or overly positive results.

2.9. Realization

Revenues are recognized when they are earned or realized. Realization is assumed to occur when the seller receives cash or a claim to cash (receivable) in exchange for goods or services. This concept is related to conservatism in that revenue (income) is only recorded when it actually occurs and not at the point in time when a contract is awarded. For instance, if a company is awarded a contract to build an office building the revenue from that project would not be recorded in one lump sum but rather it would be divided over time according to the work that is actually being done.

2.10. Consistency

Once an entity decides on one method of reporting (i.e. method of accounting for inventory) it must use that same method for all subsequent events. This ensures that differences in financial position between reporting periods are a result of changes in the operations and not to changes in the way items are accounted for.

2.11. Materiality

Accounting practice only records events that are significant enough to justify the usefulness of the information. Technically, each time a sheet of paper is used, the asset

Office supplies is decreased by an infinitesimal amount but that transaction is not worth accounting for. By understanding and applying these principles you will be able to read, prepare, and compare financial statements with clarity and accuracy. The bottom-line is that the ethical practice of accounting mandates reporting income as accurately as possible and when there is uncertainty, choosing to err on the side of caution

: Organizing A Business: Equity And Debt Financing

Topic Objective:

At the end of this topic student would be able to:

- Define Equity Financing
- Understand the concepts of long-term and short-term financing
- Learn about drawbacks and alternatives to debt financing

Definition/Overview:

Long Term Debt Financing: Long Term Debt Financing usually applies to assets your business is purchasing, such as equipment, buildings, land, or machinery. With long term debt financing, the scheduled repayment of the loan and the estimated useful life of the assets extends over more than one year.

Short Term Debt Financing: Short Term Debt Financing usually applies to money needed for the day-to-day operations of the business, such as purchasing inventory, supplies, or paying the wages of employees. Short term financing is referred to as an operating loan or short term loan because scheduled repayment takes place in less than one year. A line of credit is an example of short term debt financing.

Equity Financing: The act of raising money for company activities by selling common or preferred stock to individual or institutional investors. In return for the money paid, shareholders receive ownership interests in the corporation.

Key Points:

1. Overview of Debt Financing

Debt financing is financing a company by selling the bonds, notes or mortgages held by the business. Basically it is borrowing money to keep your business running. Long term debt financing is typically associated with larger assets such as buildings, equipment, land, and large machinery. The schedule for repayment for long term debt financing spends for more than a year. Short term debt financing is mostly associated with operations of the business such as inventory purchasing, payroll, and supplies. The repayment of short term debt financing happens in less than a year. With debt financing, your business does not have to give up future profits or ownership in the company like with equity financing.

Debt financing is more commonly known as selling bonds or debentures. Debentures are tools used by large companies to raise capital for their projects and operations. This is known as a debt offering since the company literally goes into debt to the investors until the price of the debenture is paid back, plus interest, or until it is converted into stock. The company must record this debt in their balance sheet. If bankruptcy occurs, the debenture holders are considered creditors and must be paid back by the companies remaining assets. Debentures are a way for companies to raise capital without having to use their assets or give up ownership in their company. This leaves their assets free to do other things to generate capital for the business.

2. Drawbacks to Debt Financing

- **Repayment:** As mentioned above, your sole obligation to the lender is to make your payments. Unfortunately even if your business fails, you will still have to make these payments. And if you

are forced into bankruptcy, your lenders will have claim to repayment before any equity investors.

- **High rates:** Even after calculating the discounted interest rate from your tax deductions, as explained above, you may still be faced with a high interest rate. Interest rates will vary with macroeconomic conditions, your history with the banks, your business credit rating and your personal credit history
- **Impacts your credit rating:** It might seem attractive to keep bringing on debt when your firm needs money, a practice known as leveraging up, but each loan will be noted on your credit rating. And the more you borrow, the higher the risk to the lender, and the higher interest rate you'll pay.
- **Cash and collateral:** Even if you plan to use the loan to invest in an important asset, you'll need to make sure your business will be generating sufficient cash flows by the time loan repayment starts. Also you'll likely be asked to put up collateral on the loan in case you default on your payments.

3. Alternatives to Debt Financing

Equity financing: This involves selling shares of your company to interested investors, or putting your own money into the company.

Mezzanine financing: Lenders who set up this debt tool offer the business unsecured debt (no collateral is required). The tradeoff is a high interest rate, in the 20- 30 percent range. Plus there's a catch. The lender has the right to convert the debt into equity in the company if the company defaults on payments. Despite the high interest rate, mezzanine financing appeals to entrepreneurs because it offers quick liquidity, and even though it can be converted to equity, the issuing bank usually does not want to be an equity holder, meaning they're not looking to control the company.

Hybrid financing: Most likely you'll turn to a combination of debt and equity financing to fund your venture. The question then becomes: What is the proper combination? When deciding optimal capital structure, a common finance theory is the Modigliani-Miller theorem, which states that in a perfect market, without taxes, the value of a firm is the same whether it is financed completely by debt or equity or a hybrid. This, however, is considered too theoretical

since real companies do have to pay taxes, and there are costs associated with bankruptcy. There are several other theories and formulas on determining optimal capital structures.

4. Accounting Debt

In national accounting, debts are added according to those who are indebted. Household debt is the debt held by households. "National" or Public debt is the debt held by the various governmental institutions (federal government, states, cities ...). Business debt is the debt held by businesses. Financial debt is the debt held by the financial sector (from one financial institution to another). Total debt is the sum of all those debts, excluding financial debt to prevent double accounting. These various types of debt can be computed in debt/GDP ratios. Those ratios help to assess the speed of variations in the indebtedness and the size of the debt due. For example the USA have a high consumer debt and a low public debt, while in eastern European countries, for example, the opposite tends to be true. There are differences in the accounting of debt for private and public agents. If a private agent promises to pay something later, it has a debt, and this debt is enforceable by public agents. If a public body passes a law stating that it'll pay something later (a kind of promise), it keeps the right to change the law later (and not to pay). This is why, for instance, the money governments promised to pay for retirements does not show up in the public debt assessment, whereas the money private companies promised to pay for retirements do.

4.1. Securitization

Securitization occurs when a company groups together assets or receivables and sells them in units to the market through a trust. Any asset with a cashflow can be securitized. The cash flows from these receivables are used to pay the holders of these units.

Companies often do this in order to remove these assets from their balance sheets and monetize an asset. Although these assets are "removed" from the balance sheet and are supposed to be the responsibility of the trust, that does not end the company's involvement. Often the company maintains a special interest in the trust which is called an "interest only strip" or "first loss piece". Any payments from the trust must be made to regular investors in precedence to this interest. This protects investors from a degree of risk, making the securitization more attractive. The aforementioned brings into question

whether the assets are truly off-balance-sheet given the company's exposure to losses on this interest

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| <ul style="list-style-type: none">▸ In Section 2 of this course you will cover these topics:<ul style="list-style-type: none">▸ Planning For And Predicting Performance▸ Recording Accounting Data |
| <ul style="list-style-type: none">▸ You may take as much time as you want to complete the topic covered in section 2. There is no time limit to finish any Section, However you must finish All Sections before semester end date. |
| <ul style="list-style-type: none">▸ If you want to continue remaining courses later, you may save the course and leave. You can continue later as per your convenience and this course will be available in your area to save and continue later |

: Planning For And Predicting Performance

Topic Objective:

At the end of this topic student would be able to:

- Define Financial Performance and Financial Forecasting
- Learn about fundamental analysis and financial performance
- Learn about the methods of financial forecasting and prediction

Definition/Overview:

Financial Performance: A subjective measure of how well a firm can use assets from its primary mode of business and generate revenues. This term is also used as a general measure of

a firm's overall financial health over a given period of time, and can be used to compare similar firms across the same industry or to compare industries or sectors in aggregation.

Financial Forecasting: Financial forecasting allows financial managers to anticipate events before they occur, particularly the need for raising funds externally. An important consideration is that growth may call for additional sources of financing because profit is often inadequate to cover the net buildup in receivables, inventory, and other asset accounts. When forecasting, one must take into account estimated future levels of receivables, inventory, payables, and other corporate accounts as well as its anticipated profits and borrowing requirements. From this data collecting financial managers must strategically plan the management of their business or suffer profit loss and financial loss from investors.

Key Points:

1. Importance of Balance

Kaplan and Norton probably didn't mean balance in an exact and literal way that there has to be perfect balance in all areas of business. The point is that to be successful a business needs to pay attention to, and work to improve, all key business areas. They present a basic set of four segments: Customer, Learning & Growth, Internal Processes, and Financial.

According to Kaplan and Norton, many companies pay too much attention to, and guide their business disproportionately by, the financial aspects of their business. Too frequently, they also gauge success only by short term financial factors. Of course financial factors are important. Without financial success virtually no business will be around for long. On the other hand, financial success, no matter how great, will be short lived if a business is not paying attention to satisfying customers or its internal processes.

2. Financial Objectives Drive Financial Performance

As noted above, all companies pay attention to financial performance, sometimes too much so. But monitoring financial performance is a lagging indicator; it looks at results that tell you how you have done in the previous period. Obviously at that point it is too late to do anything to alter or improve the financial performance. What really drives financial performance is setting SMART objectives based on clear goals, and then creating detailed action plans or strategies that will lead to the objectives being achieved.

Setting objectives that can be measured on weekly and monthly basis means you are measuring leading indicators of financial performance; numbers that indicate or predict what the end of period numbers will be. Leading indicators provide valuable information about financial performance, and they provide the opportunity to take corrective or improvement action instead of passively waiting to learn results when the period is over.

3. Fundamental Analysis and Financial Performance

In the broadest terms, fundamental analysis of financial performance involves looking at any data, besides the trading patterns of the financial firm itself that can be expected to impact the price or perceived value of a stock. As the name implies, it means getting down to basics. Unlike its cousin technical analysis, which focuses only on the trading and price history of a stock, fundamental analysis focuses on creating a portrait of a company, identifying the intrinsic or fundamental value of its financial performance based on that information?

Some of the indicators commonly used to assess company's financial performance include: cash flow; return on assets; conservative gearing; history of profit retention for funding future growth; and soundness of capital management for the maximizing of shareholder earnings and returns. Think of the stock market as a shopping mall: stocks are the items for sale in the retail outlets. Technical analysts will ignore the goods for sale. Instead, they will keep an eye on the crowds as a guide for what to buy. If they notice shoppers congregating inside a computer shop, our

technical analysts will try to buy as many PCs as they can, betting that the growing demand will push PC prices higher.

Fundamental analysts have a more staid approach. Their sights are set solely on the products in the mall. Shoppers are dismissed as an unreliable, emotional herd with no inkling of the real value of the goods for sale. Our fundamental analysts move slowly through the stores seeking the best deals. Once the crowd moves on from the PCs, they will take a closer look at the ones that were passed over. Fundamental analysts might take a stab at determining the scrap value of the PC stripped down to its hard disk, memory cards, monitor and keyboard. In the stock market, this is akin to calculating the book value or liquidation price of a company.

They will also take a very close look at the quality of the PC. Is it going to last, or will it break down within a year? The fundamental analysts will pore over the specifications, scrutinize the manufacturer's warranty and consult consumer reports. Similarly, equity analysts check a company's balance sheet for financial stability. Then, the fundamental analysts might try to understand the performance of the PC in terms of, say, processing power, memory or image resolution. These are like the forecast earnings and dividends identified from a company's income statement.

Finally, the fundamental analysts will put together all the data and come up with an 'intrinsic value' or value independent of the current sale price. If the sale price is less than the calculated intrinsic value, the fundamentalists will buy it. If not, they will either sell the PCs they already own or wait for prices to fall before buying another one. Performing fundamental analysis can be a lot of hard work. But that is, arguably, the source of its appeal. By taking the trouble to dig into a company's financial statements and assess its future prospects, investors can learn enough to know when the stock price is wrong. Those investors able to spot the market's mistakes can make themselves money - a lot of it. At the same time, buying companies based on intrinsic, long-term value protects investors from the dangers of day-to-day market flux.

However, the fact that fundamental analysis shows that a stock is undervalued does not guarantee that it will trade at its intrinsic value any time soon. Things are not so simple. In reality, real share price behavior relentlessly calls into question almost every stock holding, and even the most independently minded investor can start doubting the merits of fundamental analysis. There is no magic formula for figuring out intrinsic value. When the stock market is booming, it is easy for investors to fool themselves into thinking they have a knack for picking

winners. But when the market falls and the outlook is uncertain, investors cannot rely on luck. They actually need to know what they're doing.

That said, there is much that the investor can do to learn about fundamentals. Investors who roll up their sleeves and tackle the terminology, tools and techniques of fundamental analysis will enjoy greater confidence in using financial information and, at the same time, will probably become better stock pickers. At the very least, investors will have a better idea of what is meant when someone recommends a stock on strong fundamentals.

4. The Role of Financial Manager in Forecasting

The financial manager must also make overall forecasts of future capital requirements to ensure that funds will be available to finance new investment programs. The first step in making such a forecast is to obtain an estimate of sales during each year of the planning period. This estimate is worked out jointly by the marketing, production, and finance departments: the marketing manager estimates demand; the production manager estimates capacity; and the financial manager estimates availability of funds to finance new accounts receivable, inventories, and fixed assets.

For the predicted level of sales, the financial manager estimates the funds that will be available from the company's operations and compares this amount with what will be needed to pay for the new fixed assets (machinery, equipment, etc.). If the growth rate exceeds 10 percent a year, asset requirements are likely to exceed internal sources of funds, so plans must be made to finance them by issuing securities. If, on the other hand, growth is slow, more funds will be generated than are required to support the estimated growth in sales. In this case, the financial manager will consider a number of alternatives, including increasing dividends to stockholders, retiring debt, using excess funds to acquire other firms, or, perhaps, increasing expenditures on research and development.

5. Methods of Financial Forecasting and Prediction

5.1. Cash Budget

One of the principal methods of forecasting the financial needs of a business is the cash budget, which predicts the combined effects of planned operations on the firm's cash flow. A positive net cash flow means that the firm will have surplus funds to invest. But if the cash budget indicates that an increase in the volume of operations will lead to a negative cash flow, additional financing will be required. The cash budget thus indicates the amount of funds that will be needed or available month by month or even week by week.

A firm may have excess cash for a number of reasons. There are likely to be seasonal or cyclic fluctuations in business. Resources may be deliberately accumulated as a protection against a number of contingencies. Since it is wasteful to allow large amounts of cash to remain idle, the financial manager will try to find short-term investments for sums that will be needed later. Short-term government or business securities can be selected and balanced in such a way that the financial manager obtains the maturities and risks appropriate to a firm's financial situation.

5.2. Accounts Receivable

Accounts receivable are the credit a firm gives its customers. The volume and terms of such credit vary among businesses and among nations; for manufacturing firms in the United States, for example, the ratio of receivables to sales ranges between 8 and 12 percent, representing an average collection period of approximately one month. The basis of a firm's credit policy is the practice in its industry; generally, a firm must meet the terms offered by competitors. Much depends, of course, on the individual customer's credit standing.

To evaluate a customer as a credit risk, the credit manager considers what may be called the five Cs of credit: character, capacity, capital, collateral, and conditions. Information on these items is obtained from the firm's previous experience with the customer, supplemented by information from various credit associations and credit-reporting agencies. In reviewing a credit program, the financial manager should regard losses from bad debts as part of the cost of doing business. Accounts receivable represent an investment in the expansion of sales. The return on this investment can be calculated as in any capital budgeting problem.

6. Net Present Value

Each potential project's value should be estimated using a discounted cash flow (DCF) valuation, to find its net present value (NPV). This valuation requires estimating the size and timing of all of the incremental cash flows from the project. These future cash flows are then discounted to determine their present value. These present values are then summed, to get the NPV. The NPV decision rule is to accept all positive NPV projects in an unconstrained environment, or if projects are mutually exclusive, accept the one with the highest NPV (GE).

The NPV is greatly affected by the discount rate, so selecting the proper rate - sometimes called the hurdle rate - is critical to making the right decision. The hurdle rate is the minimum acceptable return on an investment. It should reflect the riskiness of the investment, typically measured by the volatility of cash flows, and must take into account the financing mix. Managers may use models such as the CAPM or the APT to estimate a discount rate appropriate for each particular project, and use the weighted average cost of capital (WACC) to reflect the financing mix selected. A common practice in choosing a discount rate for a project is to apply a WACC that applies to the entire firm, but a higher discount rate may be more appropriate when a project's risk is higher than the risk of the firm as a whole.

7. Internal rate of return

The internal rate of return (IRR) is defined as the discount rate that gives a net present value (NPV) of zero. It is a commonly used measure of investment efficiency. The IRR method will result in the same decision as the NPV method for (non-mutually exclusive) projects in an unconstrained environment, in the usual cases where a negative cash flow occurs at the start of the project, followed by all positive cash flows. In most realistic cases, all independent projects that have an IRR higher than the hurdle rate should be accepted. Nevertheless, for mutually exclusive projects, the decision rule of taking the project with the highest IRR - which is often used - may select a project with a lower NPV.

In some cases, several zero NPV discount rates may exist, so there is no unique IRR. The IRR exists and is unique if one or more years of net investment (negative cash flow) are followed by years of net revenues. But if the signs of the cash flows change more than once, there may be several IRRs. The IRR equation generally cannot be solved analytically but only via iterations.

One shortcoming of the IRR method is that it is commonly misunderstood to convey the actual annual profitability of an investment. However, this is not the case because intermediate cash flows are almost never reinvested at the project's IRR; and, therefore, the actual rate of return is almost certainly going to be lower. Accordingly, a measure called Modified Internal Rate of Return (MIRR) is often used.

Despite a strong academic preference for NPV, surveys indicate that executives prefer IRR over NPV, although they should be used in concert. In a budget-constrained environment, efficiency measures should be used to maximize the overall NPV of the firm. Some managers find it intuitively more appealing to evaluate investments in terms of percentage rates of return than dollars of NPV.

8. Equivalent annuity method

The equivalent annuity method expresses the NPV as an annualized cash flow by dividing it by the present value of the annuity factor. It is often used when assessing only the costs of specific

projects that have the same cash inflows. In this form it is known as the equivalent annual cost (EAC) method and is the cost per year of owning and operating an asset over its entire lifespan.

It is often used when comparing investment projects of unequal lifespans. For example if project A has an expected lifetime of 7 years, and project B has an expected lifetime of 11 years it would be improper to simply compare the net present values (NPVs) of the two projects, unless the projects could not be repeated. The use of the EAC method implies that the project will be replaced by an identical project.

Alternatively the chain method can be used with the NPV method under the assumption that the projects will be replaced with the same cash flows each time. To compare projects of unequal length, say 3 years and 4 years, the projects are chained together, i.e. four repetitions of the 3 year project are compared to three repetitions of the 4 year project. The chain method and the EAC method give mathematically equivalent answers. The assumption of the same cash flows for each link in the chain is essentially an assumption of zero inflation, so a real interest rate rather than a nominal interest rate is commonly used in the calculations.

9. Real options

Real options analysis has become important since the 1970s as option pricing models have gotten more sophisticated. The discounted cash flow methods essentially value projects as if they were risky bonds, with the promised cash flows known. But managers will have many choices of how to increase future cash inflows, or to decrease future cash outflows. In other words, managers get to manage the projects - not simply accept or reject them. Real options analysis try to value the choices - the option value - that the managers will have in the future and adds these values to the NPV.

10. Ranked Projects

The real value of capital budgeting is to rank projects. Most organizations have many projects that could potentially be financially rewarding. Once it has been determined that a particular

project has exceeded its hurdle, then it should be ranked against peer projects (e.g. - highest Profitability index to lowest Profitability index). The highest ranking projects should be implemented until the budgeted capital has been expended

: Recording Accounting Data

Topic Objective:

At the end of this topic student would be able to:

- Define Accounting Data
- Learn the concept of bookkeeping and ledger

Definition/Overview:

Accounting Data: accounting data - all the data (ledgers and journals and spreadsheets) that support a financial statement; can be hard copy or machine readable

Key Points:

1. Recording Accounting Data

The ultimate goal of a business financial accounting system is to produce financial statements. However, the road from the recording of basic accounting data to the completion of the financial statements is long and arduous, especially for large, complex organizations. The starting point for the identification and recording of financial accounting information is a transaction, which is defined as an exchange of goods or services from one individual or enterprise to another. To

satisfy the objectivity concept, each transaction must be supported by relevant documentation, which is retained for some required length of time.

Once a transaction is identified, it must be recorded, or posted, to an account, which is a record of transactions for one uniquely identified activity. For example, under the general heading of cash, separate accounts might be established for till cash, payroll checks, vendor checks, other checks, and the like. A large business can easily have hundreds, or even thousands, of separate primary accounts, which are combined to form the general ledger, plus subsidiary accounts that support the primary accounts. The subsidiary accounts, which pertain to very specific assets or liabilities or to individual patients or vendors, are aggregated to create data for a primary (general ledger) account. For example, individual patient charges, which are carried in subsidiary accounts, are aggregated into one or more general ledger revenue accounts.

To help manage the large number of accounts, businesses have a document called a chart of accounts, which assigns a unique numeric code to each account. For example, the till cash account might have the code 1-1000-00 while the payroll checks account might have the code 1-1100-00. The first 1 indicates that the account is an asset account; the second 1 indicates a cash account; and the next digit, 0 or 1, indicates the specific cash account. Further numbers are available should the organization decide to subdivide either the till cash or payroll checks accounts into subsidiary accounts. Because everyone who deals with the accounts is familiar with the business chart of accounts, transactions can be easily sorted by account code to ensure that transactions are posted to the correct account.

2. Bookkeeping

Bookkeeping is the recording of the value of assets, liabilities, income, and expenses in the daybooks, journals, and ledgers, which debit and credit entries are chronologically posted to record changes in value. Bookkeeping is often mistaken for accounting, which is the system of recording, verifying, and reporting such information. Practitioners of accounting are called accountants. Bookkeeping is undertaken by individuals and organizations including companies and legal persons. It refers to "keeping records of what is bought, sold, owed, and owned; what money comes in, what goes out, and what is left." Bookkeeping is parted into accounting

periods, and bookkeepers' work is closely related to that of accountants. Individual and family bookkeeping involves keeping track of income and expenses in a cash account record, checking account register, or savings account passbook. Individuals who borrow or lend money track how much they owe to others or are owed from others. Bookkeeping may be performed using paper and a pen or pencil or using computer software.

3. Bookkeeper

A bookkeeper (or book-keeper), sometimes called an accounting clerk in the United States, is a person who records the day-to-day financial transactions of an organization. A bookkeeper is usually responsible for writing up the "daybooks." The daybooks consist of purchase, sales, receipts and payments. The bookkeeper is responsible for ensuring all transactions are recorded in the correct daybook, suppliers ledger, customer ledger and general ledger. The bookkeeper brings the books to the trial balance stage. An accountant may prepare the income statement and balance sheet using the trial balance and ledgers prepared by the bookkeeper.

4. Bookkeeping systems

Two common bookkeeping systems used by businesses and other organizations are the single-entry bookkeeping system and the double-entry bookkeeping system. Single-entry bookkeeping uses only income and expense accounts, recorded primarily in a revenue and expense journal. Single-entry bookkeeping is adequate for many small businesses. Double-entry bookkeeping requires posting (recording) each transaction twice, using debits and credits.

4.1. Single-entry system

The primary bookkeeping record in single-entry bookkeeping is the cash book, which is similar to a checking (cheque) account register but allocates the income and expenses to various income and expense accounts. Separate account records are maintained for petty cash, accounts payable and receivable, and other relevant transactions such as inventory and travel expenses.

5. Ledger

Ledger (or book of final entry) is a record of accounts, each recorded individually (on a separate page) with its balance. (Ledger is also a book holding such records.) Unlike the journal listing chronologically all financial transactions without balances, the ledger summarizes values of one type of financial transactions per account, which constitute the basis for the balance sheet and income statement. Ledgers include:

- Customer ledger of financial transactions with a customer
- Supplier ledger of financial transactions with a supplier
- General (nominal) ledger representing assets, liabilities, income and expenses

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| <ul style="list-style-type: none">▸ In Section 3 of this course you will cover these topics:<ul style="list-style-type: none">▸ Completing The Accounting Cycle And Preparing Financial Statements▸ Using Analytical Data Review For Internal Financial Decisions And Planning For Cash |
| <ul style="list-style-type: none">▸ You may take as much time as you want to complete the topic covered in section 3. There is no time limit to finish any Section, However you must finish All Sections before semester end date. |
| <ul style="list-style-type: none">▸ If you want to continue remaining courses later, you may save the course and leave. You can continue later as per your convenience and this course will be available in your area to save and continue later. |

Topic Objective:

At the end of this topic student would be able to:

- Define Accounting Cycle and Financial Statement
- Learn about the steps of accounting cycle
- Learn about the purpose of financial statement

Definition/Overview:

Accounting Cycle: The primary objectives of the accounting function in an organization are to process financial information and to prepare financial statements at the end of the accounting period. Companies must systematically process financial information and must have staff who prepare financial statements on a monthly, quarterly, and/or annual basis. To meet these primary objectives, a series of steps is required. Collectively these steps are known as the *accounting cycle*. The steps, applicable to a manual accounting system, are described below. Later, there will be a brief discussion of a computerized processing system.

Financial Statement: Financial statements (or financial reports) are formal records of a business' financial activities.

Key Points:**1. Steps of Accounting Cycle**

- **Collect and analyze data from transactions and events:** As transactions and events related to financial resources occur, they are analyzed with respect to their effect on the financial position of the company. As an example, consider the sales for a day in a retail establishment that are collected on a cash register tape. These sales become inputs into the accounting system. Every organization establishes a chart of accounts that identifies the categories for recording transactions and events. The chart of accounts for the retail establishment mentioned earlier in this paragraph will include Cash and Sales.
- **Journalize transactions:** After collecting and analyzing the information obtained in the first step, the information is entered in the general journal, which is called the book of original entry.

Journalizing transactions may be done continually, but this step can be done in a batch at the end of the day if data from similar transactions are being sorted and collected, on a cash register tape, for example.

- **Post to general ledger:** The general journal entries are posted to the general ledger, which is organized by account. All transactions for the same account are collected and summarized; for example, the account entitled "Sales" will accumulate the total value of the sales for the period. If posting were done daily, the "Sales" account in the ledger would show the total sales for each day as well as the cumulative sales for the period to date. Posting to ledger accounts may be less frequent, perhaps at the end of each day, at the end of the week, or possibly even at the end of the month.
- **Prepare an unadjusted trial balance:** At the end of the period, double-entry accounting requires that debits and credits recorded in the general ledger be equal. Debit and credit merely signify position left and right, respectively. Some accounts normally have debit balances (e.g., assets and expenses) and other accounts have credit balances (e.g., liabilities, owners' equity and revenues). As transactions are recorded in the general journal and subsequently posted to the ledger, all amounts recorded on the debit side of accounts (i.e., recorded on the left side) must equal all amounts recorded on the credit side of accounts (i.e., recorded on the right side). Preparing an unadjusted trial balance tests the equality of debits and credits as recorded in the general ledger. If unequal amounts of debits and credits are found in this step, the reason for the inequality is investigated and corrected before proceeding to the next step. Additionally, this unadjusted trial balance provides the balances of all the accounts that may require adjustment in the next step.
- **Prepare adjustments:** Period-end adjustments are required to bring accounts to their proper balances after considering transactions and/or events not yet recorded. Under accrual accounting, revenue is recorded when earned and expenses when incurred. Thus, an entry may be required at the end of the period to record revenue that has been earned but not yet recorded on the books. Similarly, an adjustment may be required to record an expense that may have been incurred but not yet recorded.
- **Prepare an adjusted trial balance:** As with an unadjusted trial balance, this step tests the equality of debits and credits. However, assets, liabilities, owners' equity, revenues, and expenses will now reflect the adjustments that have been made in the previous step. If there should be

unequal amounts of debits and credits or if an account appears to be incorrect, the discrepancy or error is investigated and corrected.

- **Prepare financial statements:** Financial statements are prepared using the corrected balances from the adjusted trial balance. These are one of the primary outputs of the financial accounting system.
- **Close the accounts:** Revenues and expenses are accumulated and reported by period, either a monthly, quarterly, or yearly. To prevent their not being added to or comingled with revenues and expenses of another period, they need to be closed out that is, given zero balances at the end of each period. Their net balances, which represent the income or loss for the period, are transferred into owners' equity. Once revenue and expense accounts are closed, the only accounts that have balances are the asset, liability, and owners' equity accounts. Their balances are carried forward to the next period.
- **Prepare a post-closing trial balance:** The purpose of this final step is two-fold: to determine that all revenue and expense accounts have been closed properly and to test the equality of debit and credit balances of all the balance sheet accounts, that is, assets, liabilities and owners' equity.

2. Purpose of Financial Statements

"The objective of financial statements is to provide information about the financial position, performance and changes in financial position of an enterprise that is useful to a wide range of users in making economic decisions." Financial statements should be understandable, relevant, reliable and comparable. Reported assets, liabilities and equity are directly related to an organization's financial position. Reported income and expenses are directly related to an organization's financial performance. Financial statements are intended to be understandable by readers who have "a reasonable knowledge of business and economic activities and accounting and who are willing to study the information diligently."

- Owners and managers require financial statements to make important business decisions that affect its continued operations. Financial analysis are then performed on these statements to

provide management with a more detailed understanding of the figures. These statements are also used as part of management's annual report to the stockholders.

- Employees also need these reports in making collective bargaining agreements (CBA) with the management, in the case of labor unions or for individuals in discussing their compensation, promotion and rankings.
- External Users are potential investors, banks, government agencies and other parties who are outside the business but need financial information about the business for a diverse number of reasons.
- Prospective investors make use of financial statements to assess the viability of investing in a business. Financial analyses are often used by investors and is prepared by professionals (financial analysts), thus providing them with the basis in making investment decisions.
- Financial institutions (banks and other lending companies) use them to decide whether to grant a company with fresh working capital or extend debt securities (such as a long-term bank loan or debentures) to finance expansion and other significant expenditures.
- Government entities (tax authorities) need financial statements to ascertain the propriety and accuracy of taxes and other duties declared and paid by a company.
- Media and the general public are also interested in financial statements for a variety of reasons.

3. Government financial statements

The rules for the recording, measurement and presentation of government financial statements may be different from those required for business and even for non-profit organizations. They may use either of two accounting methods: accrual accounting, or cash accounting, or a combination of the two. A complete set of chart of accounts is also used that is substantially different from the chart of a profit-oriented business

4. Audit and legal implications

Although the legal statutes may differ from country to country, an audit of financial statements are usually, but not exclusively required for investment, financing, and tax purposes. These are usually performed by independent accountants or auditing firms. Results of the audit are

summarized in an audit report that either provide an unqualified opinion on the financial statements or qualifications as to its fairness and accuracy. The audit opinion on the financial statements is usually included in the annual report.

There has been much legal debate over who an auditor is liable to. Since audit reports tend to be addressed to the current shareholders, it is commonly thought that they owe a legal duty of care to them. But this may not be the case as determined by common law precedent. In Canada, auditors are liable only to investors using a prospectus to buy shares in the primary market. In the United Kingdom, they have been held liable to potential investors when the auditor was aware of the potential investor and how they would use the information in the financial statements. Nowadays auditors tend to include in their report liability restricting language, discouraging anyone other than the addressees of their report from relying on it. Liability is an important issue: in the UK, for example, auditors have unlimited liability.

In the United States, especially in the post-Enron era there has been substantial concern about the accuracy of financial statements. Corporate officers (the chief executive officer (CEO) and chief financial officer (CFO)) are personally liable for attesting that financial statements "do not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by th[e] report." Making or certifying misleading financial statements exposes the people involved to substantial civil and criminal liability. For example Bernie Ebbers (former CEO of WorldCom) was sentenced to 25 years in federal prison for allowing WorldCom's revenues to be overstated by \$11 billion over five years.

5. Standards and Regulations

Different countries have developed their own accounting principles over time, making international comparisons of companies difficult. To ensure uniformity and comparability between financial statements prepared by different companies, a set of guidelines and rules are used. Commonly referred to as Generally Accepted Accounting Principles (GAAP), these set of guidelines provide the basis in the preparation of financial statements.

Recently there has been a push towards standardizing accounting rules made by the International Accounting Standards Board ("IASB"). IASB develops International Financial Reporting Standards that have been adopted by Australia, Canada and the European Union (for publicly quoted companies only), are under consideration in South Africa and other countries. The United States Financial Accounting Standards Board has made a commitment to converge the U.S. GAAP and IFRS over time

: Using Analytical Data Review For Internal Financial Decisions And Planning For Cash

Topic Objective:

At the end of this topic student would be able to:

- Define Analytical Review Procedures
- Understand the importance of financial decision making and the factors influencing it

Definition/Overview:

Analytic Review Procedures: Analytic Review Procedures include a variety of tests which can be applied to data in order to determine if the amounts are reasonable. Often, graphic output can help the auditor better visualize the data. Stepwise regression can help determine which data elements actually contribute to a linear regression. Once the relationships have been determined, they can then be measured and potential exceptions identified through the use of bounds checking

Key Points:**1. Importance of Financial Decision Making**

Today a typical farming operation spends and takes in several hundred thousand dollars per year, and receipts of over a million dollars are not uncommon. The irregular nature of farm income and expenditures, and the use of very capital intensive production technologies have made having enough financing at the right time critical to the success of a farm business.

The use of capital and credit presents the modern farmer with a number of decisions to make:

- How much to invest?
- Where to obtain capital?
- What mix of equity and debt to use?
- What credit rates and terms to negotiate?
- How much financial risk to take?

Making good financial decisions is often the difference between a prosperous, growing farm business and one that is constantly wondering how to pay the next bill.

2. Factors influencing Financial Decision Making

- **The main goal is to structure decision problems.** This is a complicated task since there are many reasons to treat financial-economic problems as multiple criteria decision problems (because of multiple actors, multiple policy constraints, multiple sources of risk, etc.).
- **A typology of problem classes:** elaborating further on how to structure decision problems it will be argued that financial decision problems can be categorized by using three criteria: the degree of uncertainty involved, the degree of decision flexibility offered (real option aspects), and the degree in which the decision outcome is affected by actions taken by other players in the field (game aspects).
- **Perception:** This involves the perception of the decision problem at hand and of the choice alternatives. The goal is to construct an adequate representation of the choice alternatives. Attention will be paid to describing choice alternatives, collecting and structuring of data, processing data into useful information, and handling partial and incomplete information. Special

focus will be on the perception and multi-dimensional modeling of uncertainty and the subsequent derivation of probability information.

- **Preferences:** This part focuses on describing the decision-makers preference structure including goals and restrictions; on deriving this preference information; on shaping preferences with respect to the choice alternatives; and on evaluating the alternatives in relation to the preferences in order to take a decision. Cognitive biases in evaluating choice alternatives are also discussed. In this final step it will become clear that preferences and perceptions are interdependent. This is illustrated with a case in portfolio management

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| <ul style="list-style-type: none">▸ In Section 4 of this course you will cover these topics:<ul style="list-style-type: none">▸ Analyzing Financial Statements For Profitability, Liquidity, And Solvency▸ Using Relevant Information For Internal Operational Decisions |
| <ul style="list-style-type: none">▸ You may take as much time as you want to complete the topic coverd in section 4. There is no time limit to finish any Section, However you must finish All Sections before semester end date. |
| <ul style="list-style-type: none">▸ If you want to continue remaining courses later, you may save the course and leave. You can continue later as per your convenience and this course will be available in your area to save and continue later. |

: Analyzing Financial Statements For Profitability, Liquidity, And Solvency

Topic Objective:

At the end of this topic student would be able to:

- Define Market Liquidity and Solvency
- Learn about the steps involved in financial statement analysis

Definition/Overview:

Market Liquidity: Market liquidity is a business, economics or investment term that refers to an asset's ability to be easily converted through an act of buying or selling without causing a significant movement in the price and with minimum loss of value. Money, or cash on hand, is the most liquid asset. An act of exchange of a less liquid asset with a more liquid asset is called liquidation. Liquidity also refers both to that quality of a business which enables it to meet its payment obligations, in terms of possessing sufficient liquid assets, and to such assets themselves.

Solvency: In finance, solvency is the ability of an entity to pay its debts with available cash. Solvency can also be described as the ability of a corporation to meet its long-term fixed expenses and to accomplish long-term expansion and growth. The better a company's solvency, the better it is financially. When a company is insolvent, it means that it can no longer operate and is undergoing bankruptcy. Solvency is a different concept from profitability, which refers to the ability to earn a profit. Businesses can be profitable without being solvent (e.g. when they are expanding rapidly). Businesses can be solvent even while losing money (e.g. when they cannibalize future cash flows, like selling accounts receivable). A business is bankrupt when it is unprofitable and insolvent.

Key Points:**1. Steps for Analyzing Financial Statements**

- **Determine profit and loss.** The income statement of the financial report is probably the easiest to read because it is a straightforward rendering of a company's profit or loss over a period of time. These figures can be useful for judging past performance and predicting future earnings,

but is also limited because not all items can be calculated reliably. The income statement also does not provide the same insight into a company that other metrics can.

- **Determine the liquidity ratio.** While different methodologies are used for different purposes, the liquidity ratio is simply the company's cash and assets divided by its debt and is used to determine a business' viability. By using only the most liquid assets, like cash and cash equivalents, versus short term debt, a more immediate metric is produced. A bankruptcy court, on the other hand, might include all assets including essential operating equipment in determining the ability of a company to pay all its outstanding debt.
- **Determine the activity ratio.** The precise data going into the activity ratio will vary from company to company, but it essentially measures the pace of a company's business. In retail, same-store sales is a key activity metric. Inventory level is important to a company with manufacturing operations. However it is determined, the activity ratio is intended to calculate how quickly a company can convert production into sales and cash, a key factor for predicting a company's future revenue and earnings.
- **Determine the profitability ratio.** Also known as margins, profitability ratios indicate how much each unit of business contributes to overall profits. It can also be viewed in aggregate, showing how much the whole company earned over a period of time compared to costs and other expenses. Profitability is calculated on numerous time frames, particularly quarterly and annually, and is used to compare to a company's past performance as well as to other companies in similar or dissimilar sectors of the economy.
- **Calculate earnings per share and share price per earning value.** Using the earnings reported in the financial statement and the estimate for future earnings, the earnings per share can be calculated and from that, the share price per earning value. This is a useful metric for stock investors attempting to determine the relative value of a stock.

: Using Relevant Information For Internal Operational Decisions

Topic Objective:

At the end of this topic student would be able to:

- Define Business Decision Mapping
- Understand the concept of decision levels
- Understand the value and volume of different kinds of decisions

Definition/Overview:

Business Decision Mapping: Business Decision Mapping (BDM) is a technique for making decisions, particularly the kind of decisions that often need to be made in business. It involves using diagrams to help articulate and work through the decision problem, from initial recognition of the need through to communication of the decision and the thinking behind it.

BDM is designed for use in making deliberative decisions - those made based on canvassing and weighing up the arguments. It is also qualitative - although numbers may be involved, the main considerations are qualitatively specified and there is no calculation-based route to the right decision. In these two key elements, BDM is similar to the natural or typical way of making decisions. However, it differs from typical, informal decision making by providing a structured, semi-formal framework, and using visual language, taking advantage of our ability to grasp and make sense of information faster and more easily when it is graphically presented.

BDM is centered on the creation of a decision map - a single diagram that brings together in one organized structure all the fundamental elements of a decision, and that functions as a focus of collaboration. BDM aims to support the decision process, making it easier, more reliable and more accountable. It addresses some major problems that can afflict business decision making the way it is generally done, including stress, anxiety, time pressure, lost thinking and inefficiency. By mapping the decision problem, the options, the arguments and all relevant evidence visually using BDM, the decision maker can avoid holding a large amount of information in his or her head, is able to make a more complete and transparent analysis and can generate a record of the thinking behind the final decision.

Key Points:**1. Decision Levels**

All businesses recognize that some decisions are more important than others, whether in their immediate impact or long term significance. As a means of understanding the significance of a decision so that we can know how much time and resources to spend on it, three levels of decision have been identified:

- **Strategic.** Strategic decisions are the highest level. Here a decision concerns general direction, long term goals, philosophies and values. These decisions are the least structured and most imaginative; they are the most risky and of the most uncertain outcome, partly because they reach so far into the future and partly because they are of such importance.
- **Tactical.** Tactical decisions support strategic decisions. They tend to be medium range, medium significance, with moderate consequences.
- **Operational.** These are every day decisions, used to support tactical decisions. They are often made with little thought and are structured. Their impact is immediate, short term, short range, and usually low cost. The consequences of a bad operational decision will be minimal, although a series of bad or sloppy operational decisions can cause harm. Operational decisions can be preprogrammed, pre-made, or set out clearly in policy manuals.

2. The value and volume of different kinds of decisions

It is these decisions that are what we mean by operational decisions. These are not one-off decisions, not unstructured decisions but high-volume, repeatable, explicit decisions. Some of these decisions are obvious and easy to find and define, others much less so. These operational decisions can be part of processing a transaction or handling an interaction. They might also be part of several different transactions or interactions. These decisions might be about personalizing a transaction or an interaction where it was previously the same for everyone and they might be decisions that no-one has ever considered before.

One of the most valuable sources of operational decisions is existing manual decisions.

Decisions referred to supervisors by staff are often operational decisions, as are those moments in a transaction or conversation where staff must consult policy manuals, regulations or look up tables. Another source of operational decisions are transactions or interactions with contradictory

results the website gives one answer while the call center gives another or where different call center representatives give different answers. Underlying this inconsistency is an operational decision that has not been identified and managed across channels, staff or transactions. Operational decisions can also be missed because they have been subsumed into a larger decision. For instance, a direct mail campaign could be considered to have 4 or 5 decisions what message, what segment of the customer base, what format, what offer and so on. If the direct mail piece went out to 100,000 people, however, you have 100,000 operational decisions. You decided in each of 100,000 cases to send this particular letter to this particular person. That decision what to send to this specific person is an operational decision. Finally there are operational decisions that never get taken. These decisions, like what options to display or how to print a statement, are so deeply hidden in the code to run the system, ATM, Kiosk or websites that no-one even thinks of them as decisions. BDM involves identifying these decisions, making them explicit and then managing and improving them over time.

When considering an operational decision for the application of Business Decision Management, it is worth considering how likely it is to show a strong ROI. Aspects of a decision that make it likely to show a high ROI from BDM include:

- Volume - the number of decisions of a particular type you must make is high. Volume alone can cause problems or exacerbate another decision problem, such as compliance or risk assessment.
- Latency - when you can see trouble coming but can't change how you make decisions in time, you might have an operational decision problem.
- Variability - if the way something is decided in a process or system is highly dependent on outside factors, like competitors or the market, then it could be a candidate thanks to this potential for variability.
- Compliance - the need to demonstrate compliance of every decision can be a driver.
- Straight-through processing - a manual review that drags down response time in a process might be hiding a problem-prone operational decision.
- Managing risk - a risk-centered decision that must be made quickly or in volume might be a good candidate for an operational decision.
- Unattended - for example, there's no person who can make a decision in transactions on your Web site or at your ATM.

- Self-service - decision required so that customers can self-serve.
- Personalized - any time you want to personalize interactions, you're making a decision.

Organizations depend on operational decision making and when operational decisions must be made in challenging circumstances, BDM is the best way to take control of them and make them work for organizations

▸ In Section 5 of this course you will cover these topics:

- Internal Planning And Measuring Tools
- Internal Allocation Of Scarce Resources
- External Reporting Issues
- Using Information For External Decisions And Comparison Of Companies

▸ You may take as much time as you want to complete the topic covered in section 5. There is no time limit to finish any Section, However you must finish All Sections before semester end date.

▸ If you want to continue remaining courses later, you may save the course and leave. You can continue later as per your convenience and this course will be available in your area to save and continue later

: Internal Planning And Measuring Tools

Topic Objective:

At the end of this topic student would be able to:

- Learn about a business plan
- Understand the concept of Integrated Business Planning (IBP)
- Learn about the components of IBP

Definition/Overview:

Business Plan: A business plan is a formal statement of a set of business goals, the reasons why they are believed attainable, and the plan for reaching those goals. It may also contain background information about the organization or team attempting to reach those goals. The business goals being attempted may be for-profit or non-profit. For-profit business plans typically focus on financial goals. Non-profit and government agency business plans tend to focus on service goals, although non-profits may also focus on maximizing profit. Business plans may also target changes in perception and branding by the customer, client, tax-payer, or larger community. A business plan having changes in perception and branding as its primary goals is called a marketing plan.

Business plans may be internally or externally focused. Externally focused plans target goals that are important to external stakeholders, particularly financial stakeholders. They typically have detailed information about the organization or team attempting to reach the goals. With for-profit entities, external stakeholders include investors and customers. External stakeholders of non-profits include donors and the clients of the non-profit's services. For government agencies, external stakeholders include tax-payers, higher-level government agencies, and international lending bodies such as the IMF, the World Bank, various economic agencies of the UN, and development banks.

Internally focused business plans target intermediate goals required to reach the external goals. They may cover the development of a new product, a new service, a new IT system, a restructuring of finance, the refurbishing of a factory or a restructuring of the organization. An internal business plan is often developed in conjunction with a balanced scorecard or a list of critical success factors. This allows success of the plan to be measured using non-financial measures. Business plans that identify and target internal goals, but provide only general guidance on how they will be met are called strategic plans. Operational plans describe the goals of an internal organization, working group or department. Project plans, sometimes known as project frameworks, describe the goals of a particular project. They may also address the project's place within the organization's larger strategic goals.

Key Points:**1. Integrated Business Planning (IBP)**

Integrated business planning (IBP) refers to the technologies, applications and processes of connecting the planning function across the enterprise to improve organizational alignment and financial performance. IBP accurately represents a holistic model of the company in order to link strategic planning and operational planning with financial planning. By deploying a single model across the enterprise and leveraging the organizations information assets, corporate executives, business unit heads and planning managers use IBP to evaluate plans and activities based on the true economic impact of each consideration.

2. Components of IBP

Business Planning is integrated across the enterprise, which enables decision makers to identify the activities that deliver the greatest financial impact across the company.

Recent developments and successes in the areas of business intelligence and performance management are accelerating the adoption of integrated business planning. While IBP has been a vision for many years; the technology required for modeling, optimization and scaling was non-existent. In broad terms, the use of mathematical representations and extensive knowledge bases enable users to build the massive, multivariable models required for Integrated Business Planning.

2.1. Analyses

Companies use IBP to translate insight into financial impact by providing analyses such as:

- Identification of top financial (profit) drivers
- Answers to what-if questions

- Simulation
- Optimization to any variable or ratio, including balance sheet, profitability, NPV, cash flow, etc
- Intelligent sensitivity analysis
- Modeling infeasibilities
- Understanding of unique performance driver relationships
- Opportunity costs and marginal economic value

2.2. Benefits

IBP transforms planning into a decisive competitive advantage by:

- Providing an integrated planning platform across marketing, operations and finance
- Generating a holistic understanding of performance drivers
- Quantifying the financial impact and interdependencies across planning alternatives
- Optimizing strategic planning and resource allocation
- Balancing sales and operations planning for profitability
- Quantifying financial risk
- Increasing business flexibility

2.3. IBP Applications

IBP has been used to successfully model and integrate the planning efforts in a number of applications, including:

- Product profitability
- Customer profitability
- Capital expenditures
- Manufacturing operations
- Supply chain

- Business processes (human and information-based)
- Business policy
- Market demand curves
- Competitive strategy

: Internal Allocation Of Scarce Resources

Topic Objective:

At the end of this topic student would be able to:

- Learn the concept of allocation of resources
- Understand the concept of productivity
- Learn about the main processes of a company

Definition/Overview:

Allocation of Resources: Apportionment of productive assets among different uses. Resource allocation arises as an issue because the resources of a society are in limited supply, whereas human wants are usually unlimited, and because any given resource can have many alternative uses. In free-enterprise systems, the price system is the primary mechanism through which resources are distributed among the uses most desired by consumers. In planned economies and in the public sectors of mixed economies, the decisions regarding resource distribution are political. Within the limits of existing technology, the aim of any economizing agency is to allocate resources in a manner that obtains the maximum possible output from a given combination of resources

Key Points:**1. Productivity**

Productivity is also used to measure efficiency, as an aid in economic planning and forecasting, and as a means of assessing the uses to which resources are being put. As to the first of these, the efficiency of industrial operations, for instance, may be evaluated by the yardstick of output per worker or machine, and such a yardstick may also provide the basis for supplemental or premium payments for workers. When pay is based on piecework alone, labour productivity becomes the sole determinant.

Productivity may also serve as a standard for grading and evaluating any group of workers performing common tasks, distinguishing the more from the less productive. And applied to equipment, productivity standards can indicate when a machine is performing poorly and is in need of service. In forecasting, productivity estimates are useful when it is necessary to be able to project the performance of the economy at some future date, given the probable size of the working force. A variant of this is common in planning for developing countries that want to increase their productivity; information about target levels of productivity, together with expectations as to the growth of the labour force and some understanding of the relation between capital per worker and output per worker, helps in estimating the amount of capital investment needed to reach the target.

Again, estimates of the probable annual gain in labour productivity together with estimates of the probable annual increase in output allow one to estimate how many jobs will become available at some time in the future. Finally, productivity is a helpful analytical tool in studying the possible allocation of resources among different uses. The extent to which resources flow to various uses depends, among other things, on their productivity in each of those uses. Changes in productivity in the course of time alter the pattern of use and cause the quantities of resources required in particular uses to change. The resulting trends depend on several things.

On the one hand, an increase in the productivity of, for instance, labour, since it means a decrease in labour requirements per unit of output, will tend to reduce the demand for labour. But it will also imply a cheapening of labour relative to the cost of other competing factors of production. Hence there will be a tendency to substitute labour for other factors. When labor cost

represents a large fraction of total cost, a productivity increase will contribute toward a reduction in the price of the product, thereby expanding sales and with them the demand for labour. The net result will depend upon the sum total of all of these separate effects. It is by no means uncommon to find that the expansionary effects predominate, and many economists consider this to be the normal outcome. In any event, the productivity concept and data on productivity trends can contribute to an understanding of resource and output flows.

2. Main processes of a company

A company can be divided into sub-processes in different ways; yet, the following five are identified as main processes, each with a logic, objectives, theory and key figures of its own. It is important to examine each of them individually, yet, as a part of the whole, in order to be able to measure and understand them. The main processes of a company are as follows:

- Real process
- Income distribution process
- Production process
- Monetary process
- Market value process

Productivity is created in the real process, productivity gains are distributed in the income distribution process and these two processes constitute the production process. The production process and its sub-processes, the real process and income distribution process occur simultaneously, and only the production process is identifiable and measurable by the traditional accounting practices. The real process and income distribution process can be identified and measured by extra calculation, and this is why they need to be analysed separately in order to understand the logic of production performance.

Real process generates the production output from input, and it can be described by means of the production function. It refers to a series of events in production in which production inputs of different quality and quantity are combined into products of different quality and quantity. Products can be physical goods, immaterial services and most often combinations of both. The characteristics created into the product by the manufacturer imply surplus value to the consumer, and on the basis of the price this value is shared by the consumer and the producer in the marketplace. This is the mechanism through which surplus value originates to the consumer and the producer likewise. Surplus value to the producer is a result of the real process, and measured proportionally it means productivity.

Income distribution process of the production refers to a series of events in which the unit prices of constant-quality products and inputs alter causing a change in income distribution among those participating in the exchange. The magnitude of the change in income distribution is directly proportionate to the change in prices of the output and inputs and to their quantities. Productivity gains are distributed, for example, to customers as lower product sales prices or to staff as higher income pay.

The production process consists of the real process and the income distribution process. A result and a criterion of success of the production process is profitability. The profitability of production is the share of the real process result the producer has been able to keep to himself in the income distribution process. Factors describing the production process are the components of profitability, i.e., returns and costs. They differ from the factors of the real process in that the components of profitability are given at nominal prices whereas in the real process the factors are at periodically fixed prices. Monetary process refers to events related to financing the business. Market value process refers to a series of events in which investors determine the market value of the company in the investment markets.

3. Surplus value as a measure of production profitability

The scale of success run by a going concern is manifold, and there are no criteria that might be universally applicable to success. Nevertheless, there is one criterion by which we can generalise

the rate of success in production. This criterion is the ability to produce surplus value. As a criterion of profitability, surplus value refers to the difference between returns and costs, taking into consideration the costs of equity in addition to the costs included in the profit and loss statement as usual. Surplus value indicates that the output has more value than the sacrifice made for it, in other words, the output value is higher than the value (production costs) of the used inputs. If the surplus value is positive, the owners profit expectation has been surpassed. Table 1 presents a surplus value calculation. This basic example is a simplified profitability calculation used for illustration and modelling. Even as reduced, it comprises all phenomena of a real measuring situation and most importantly the change in the output-input mix between two periods. Hence, the basic example works as an illustrative scale model of production without any features of a real measuring situation being lost. In practice, there may be hundreds of products and inputs but the logic of measuring does not differ from that presented in the basic example. Both the absolute and relative surplus value have been calculated in the example. Absolute value is the difference of the output and input values and the relative value is their relation, respectively. The surplus value calculation in the example is at a nominal price, calculated at the market price of each period

Topic Objective:

At the end of this topic student would be able to:

- Understand the external functions of accounting
- Understand the importance of external financial reports

Definition/Overview:

External Functions of Accounting: Accountants have two primary external reporting responsibilities: the preparation of tax returns and external financial reports. Exceedingly complex and constantly changing laws, rules, and forms govern state and federal income taxes,

payroll taxes, property taxes, and sales taxes. Accountants have their hands full just keeping up with tax regulations and forms. Accountants also have to stay abreast of changing accounting standards to prepare external financial reports.

Key Points:

1. Importance of External Financial Reports

The financial statements of a business that are the core of the external financial reports sent to its shareowners and lenders must conform with generally accepted accounting principles (GAAP). These are the authoritative guidelines, rules, and standards that govern external financial reporting to the outside investors and creditors of a business. The main purpose of having financial statements audited by an independent CPA firm is to test whether the statements have been prepared according to GAAP. If there are material departures from these ground rules of financial statement accounting and disclosure, the CPA auditor says so in the audit opinion on the financial statements.

External financial reports include footnotes that are an integral addendum to the financial statements. Footnotes are needed because the external financial report is directed to outside investors and creditors of the business who are not directly involved in the day-to-day affairs of the business. Managers should already know most of the information disclosed in footnotes. If managers prefer to have certain footnotes included in their internal accounting reports, the footnotes should be included probably in much more detail and covering more sensitive matters than footnotes presented in external financial reports. An external financial report includes three primary financial statements: One summarizes the profit-making activities of the business for the period; one summarizes the cash inflows and outflows for the same period; and one summarizes the assets of the business at the end of the period that are balanced by the claims against, and sources of, the assets

: Using Information For External Decisions And Comparison Of Companies

Topic Objective:

At the end of this topic student would be able to:

- Understand the concept of external decision making
- Understand the concept of competition in business and finance

Definition/Overview:

External Decision Making: Financial accounting provides information to decision makers who are not involved in the day-to-day operations of an organization. These external decision makers include investors, creditors, and others. The information is distributed primarily through general-purpose financial statements. Financial statements describe the condition of the organization and the events that happened during the year.

Competition: The term competition in business and finance can be defined as "the effort of two or more parties acting independently to secure the business of a third party by offering the most favorable terms".

Key Points:

1. Competition in Business and Finance

Seen as the pillar of capitalism in that it may stimulate innovation, encourage efficiency or drive down prices, competition is touted as the foundation upon which capitalism is justified.

According to microeconomic theory, no system of resource allocation is more efficient than pure competition. Competition, according to the theory, causes commercial firms to develop new

products, services and technologies, which would give consumers greater selection and better products. The greater selection typically causes lower prices for the products, compared to what the price would be if there was no competition (monopoly) or little competition (oligopoly).

However, competition may also lead to wasted (duplicated) effort and to increased costs (and prices) in some circumstances. For example, the intense competition for the small number of top jobs in music and movie acting leads many aspiring musicians and actors to make substantial investments in training which are not recouped, because only a fraction become successful.

Three levels of economic competition have been classified:

- The most narrow form is direct competition (also called category competition or brand competition), where products which perform the same function compete against each other. For example, one brand of pick-up trucks competes with several other brands of pick-up trucks. Sometimes, two companies are rivals and one adds new products to their line, which leads to the other company distributing the same new things, and in this manner they compete.
- The next form is substitute or indirect competition, where products which are close substitutes for one another compete. For example, butter competes with margarine, mayonnaise and other various sauces and spreads.
- The broadest form of competition is typically called budget competition. Included in this category is anything on which the consumer might want to spend their available money. For example, a family which has \$20,000 available may choose to spend it on many different items, which can all be seen as competing with each other for the family's expenditure.

Competition does not necessarily have to be between companies. For example, business writers sometimes refer to internal competition. This is competition within companies. The idea was first introduced by Alfred Sloan at General Motors in the 1920s. Sloan deliberately created areas of overlap between divisions of the company so that each division would be competing with the other divisions. For example, the Chevy division would compete with the Pontiac division for some market segments. Also, in 1931, Procter & Gamble initiated a deliberate system of internal brand-versus-brand rivalry. The company was organized around different brands, with each

brand allocated resources, including a dedicated group of employees willing to champion the brand. Each brand manager was given responsibility for the success or failure of the brand, and compensated accordingly. This is known as intra-brand competition.

Finally, most businesses also encourage competition between individual employees. An example of this is a contest between sales representatives. The sales representative with the highest sales (or the best improvement in sales) over a period of time would gain benefits from the employer. It should also be noted that business and economic competition in most countries is often limited or restricted. Competition often is subject to legal restrictions. For example, competition may be legally prohibited, as in the case with a government monopoly or a government-granted monopoly. Tariffs, subsidies or other protectionist measures may also be instituted by government in order to prevent or reduce competition. Depending on the respective economic policy, the pure competition is to a greater or lesser extent regulated by competition policy and competition law.

Competition between countries is quite subtle to detect, but is quite evident in the World economy. Countries compete to provide the best possible business environment for multinational corporations. Such competition is evident by the policies undertaken by these countries to educate the future workforce. For example, East Asian economies such as Singapore, Japan and South Korea tend to emphasize education by allocating a large portion of the budget to this sector, and by implementing programmes such as gifted education