3. The Balance Sheet


Balance Sheet

3.1 Cash and Internal Controls

3.2 Valuation of Accounts/Notes Receivable (Including Bad Debts)

3.3 Valuation of Inventories

3.4 Acquisition and Disposal of Long-Term Assets

3.5 Depreciation/ Amortization/ Depletion

3.6 Intangible Assets (e.g., Patents, Goodwill, etc.)

3.7 Accounts and Notes Payable

3.8 Long-Term Liabilities (e.g. Bonds Payable)

3.9 Owner's Equity

3.10 Preferred and Common Stock

3.11 Retained Earnings

3.12 Liquidity, Solvency, and Activity Analysis

3.12 Summary

3.1 Cash and Internal Controls


REGULATIONS
COMPLIANCE

- **As stated, Cash is generated from various sources.**

- Since cash is an asset acquired and generated from business activity, Internal controls must be attributed and created

- **As mentioned previously, this is for compliance purposes, which are regulated**

- **Nonetheless, this implementation allows for an increase in:**

Profit

- **There are other reasons to possess Internal Controls, besides safeguarding assets such as Cash:**

- **Accurate financial statements:**

- **Adherence to policies:**
- **Legal protection:**

- **Separate accounting from operations:**

- **Separate accounting from custody of assets:**

3.2 Valuation of Accounts/Notes Receivable (Including Bad Debts)

3.2.1 Valuation of Accounts Receivable

3.2.2 Valuation of Notes Receivable (Including Bad Debts)

3.2.1 Valuation of Accounts Receivable


Balance Sheet
ASSET
Current asset
Bill of

- **Accounts receivable (universally abbreviated as A/R), is a Control Account**

- This A/R Control Account contains the amounts that all customers owe the business.

- **Elements include:**

- **Sell on account:**
- **Collect from customers:**

- **Warning of uncollectability:**

- **Accrual accounting:**

- **A Write-off:**

- **Estimate uncollectible accounts:**

- **May include allowance for doubtful accounts:**

- **Contra-asset account:**

- **It measures the decrease in the value of accounts receivable.**

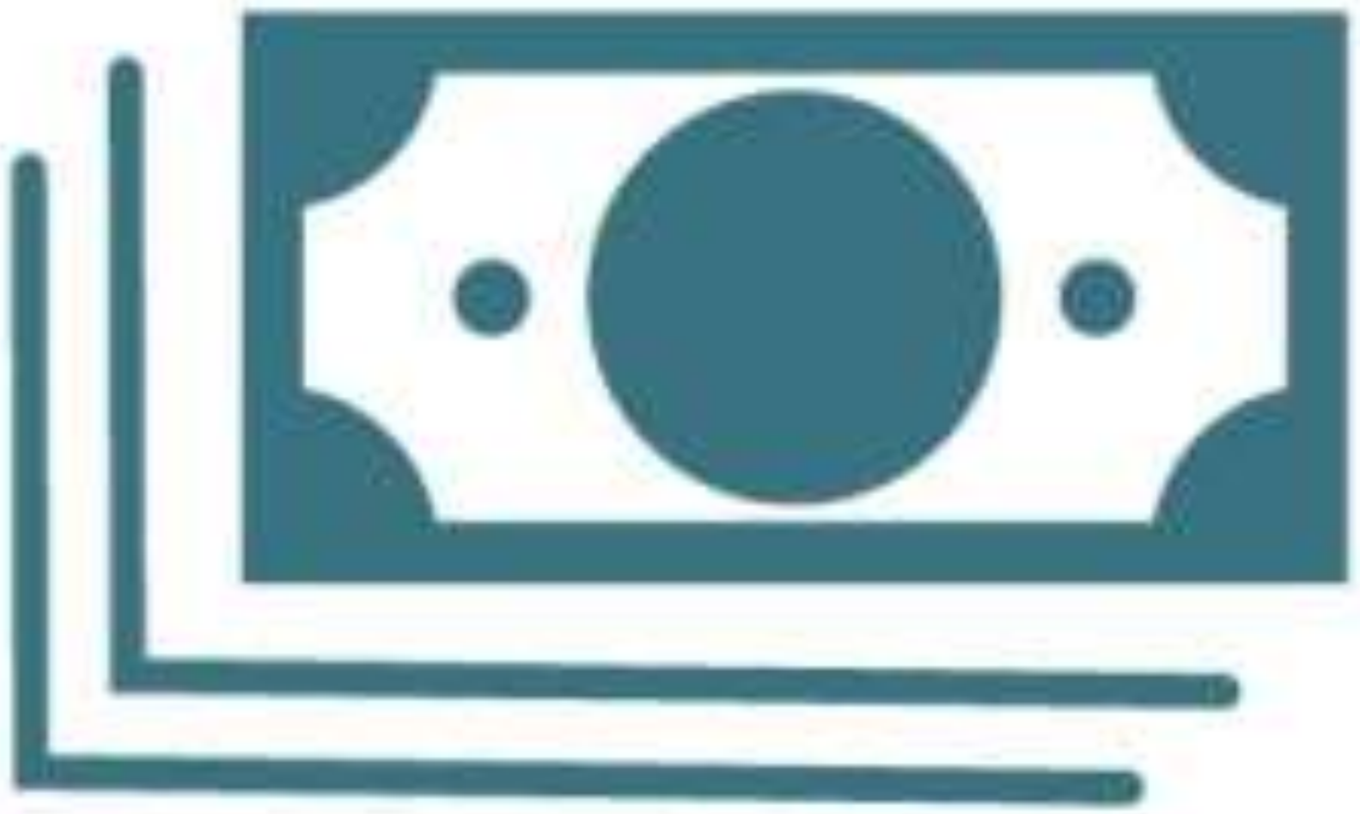
- **Percentage of accounts receivable method:**

- The method of estimating the allowance for uncollectible accounts.

- The equation is:

A/R X Est%= What allowance should be – What allowance is = Adjustment

3.2.2 Valuation of Notes Receivable (Including Bad Debts)



BANKNOTES

- **Notes receivable are a current asset when they mature within one year.**

- **Notes are recorded at their present value of each dollar amount.**

- To discount a note is to sell a note to a bank that subtracts a discount

- Discounting gives the seller the proceeds.

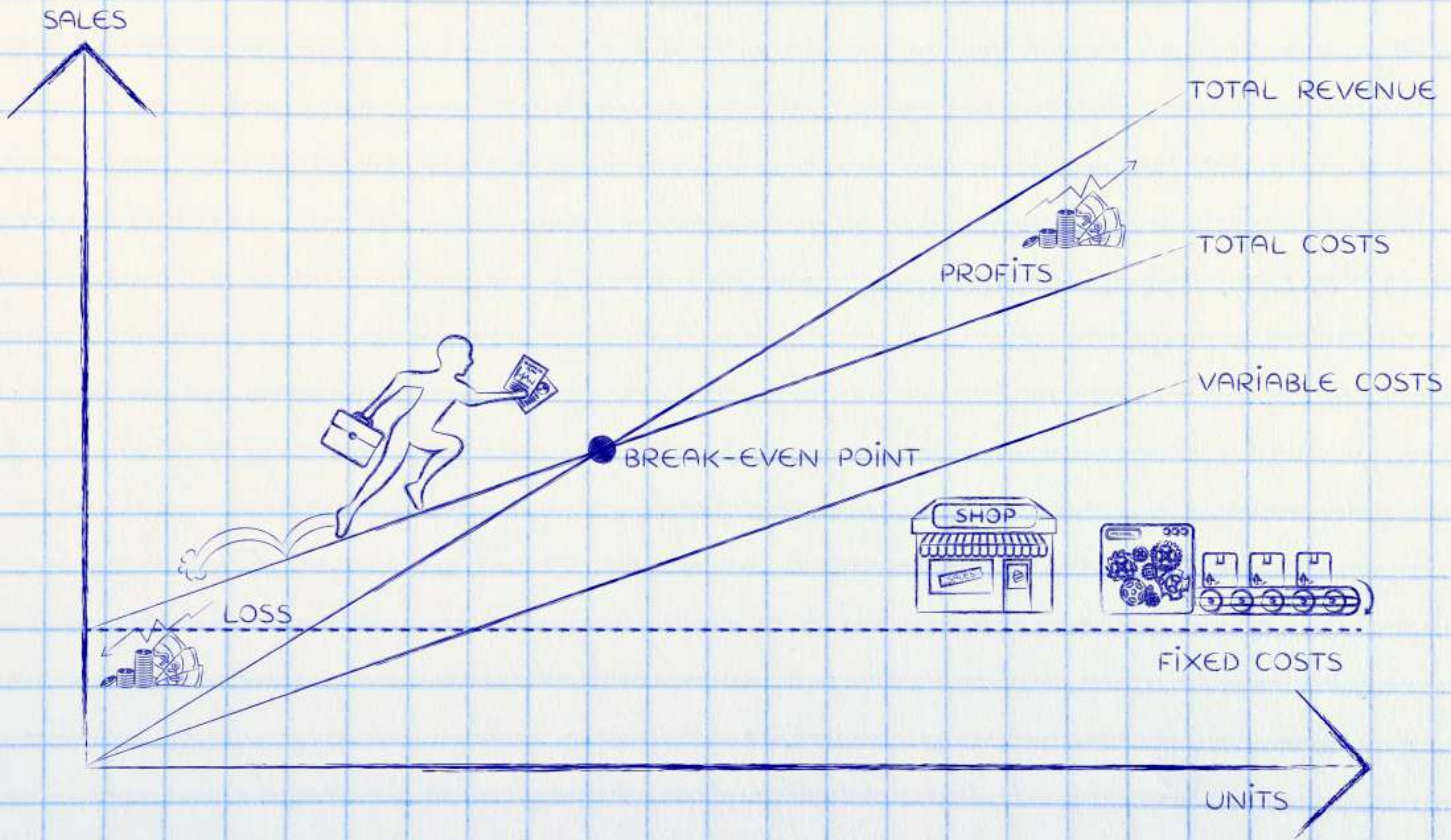
- **Components of a Note Receivable:**

Face amount:

Face interest:

- **Future value of a note:**

- **Interest-bearing note:**



SALES
TOTAL REVENUE
TOTAL COSTS
PROFITS
VARIABLE COSTS
BREAK-EVEN POINT
SHOP
LOSS
FIXED COSTS
UNITS

3.3 Valuation of Inventories


COST OF
OWNERSHIP

- Inventory Valuation is the dollar amount associated with the items contained in a company's inventory

- **Also the cost of the items defined as all of the costs necessary to get the inventory items in place and ready for sale.**

- **Inventory valuation will include the costs of:**

- Production
- Materials
- Labor
- Overhead

- **Methods to Track Inventory:**

- **Periodic inventory method:**

- **Perpetual inventory method:**

- **Days in Inventory:**

- **Inventory turnover:**

3.4 Acquisition and Disposal of Long-Term Assets

3.4.1 Acquisition of Long-Term Assets

3.4.2 Disposal of Long-Term Assets

3.4.1 Acquisition of Long-Term Assets

- **Long-term assets may also known as Plant assets, Capital assets or Fixed assets**

- These are assets that have a life longer than one year.

- **Long-term assets, by in large, allow for the transition of Capital.**
- **These assets that help a business or a person make money.**


CAPITAL ASSETS

- **Long-term assets, as well as money, are changed into another asset that helps the business make money**

- **This is when an asset is termed Capitalized.**

3.4.2 Disposal of Long-Term Assets


SALES
TOTAL REVENUE
TOTAL COSTS
PROFITS
VARIABLE COSTS
BREAK-EVEN POINT
SHOP
LOSS
FIXED COSTS
UNITS

- **A business can dispose an asset by selling it.**
- **However, one must know the value, as it is needed**

- **Book value (BV):**
  The book value of an asset is the historical cost, i.e. on the books at less accumulated depreciation for that asset.


ASSET DEPRECIATION

- The formula for computing the gain or loss on the disposal of an asset is:

- **Amount received – Book value give up = Gain or Loss**

BALANCE SHEET FOR THE YEAR ENDING 31st DECEMBER, 1893.

Receipts.

		£	s.	d.
To Balance in Bank 31st December, 1892—				
Net Balance	£390 10 1			
Subscriptions paid in 1892 in advance for 1893	23 0 10			
		413	10	11
Donations and Subscriptions		1,574	14	5
Proceeds of Lectures		16	12	1
Sales of Maps		252	9	10
Sales of Books published by the Society		364	4	1
Sales of Photographs, Casts, and Slides		69	0	0
		£2,690	11	4

Expenditure.

		£	s.	d.
By Exploration		383	7	3
Printing and Binding, including the *Quarterly Statement*		518	1	4
Maps, Lithographs, Illustrations, Photographs, Casts, and Slides		385	7	11
Management, including Rent, Salaries, Wages, Advertising, Insurance, Stationery, and Sundries		628	18	2
Postage and Carriage of *Quarterly Statements*, Books, Maps, Parcels, &c.		137	19	6
Liabilities paid off during the year		218	9	4
Subscriptions paid in 1893 in advance for 1894	£20 14 0			
Net Balance	397 13 10			
	£418 7 10			
Balance in Bank 31st December, 1893		418	7	10
		£2,690	11	4

Examined and found correct,

W. Morrison, *Treasurer.*

3.5 Depreciation/Amortization/Depletion

3.5.1 Depreciation

3.5.2 Amortization

3.5.3 Depletion

3.5.1 Depreciation

Depreciation

- **Depreciation is the official name for a type of expense**

- **This expense which is the recording of the amount of long-lived assets used up during business operations**

- **It is must be allocated for future financial periods.**

- **Depreciation is not an attempt to show the decline in the value of assets.**
- **Some assets, like buildings, may actually appreciate during the year.**


Is A Chinese Depreciati
Still A Threat To Global
Markets?
Yes
No

- **Let’s remember:**

- **Businesses depreciate all fixed assets (except land) every year.**
- **Depreciation is not money set aside to replace aging assets.**

3.5.2 Amortization


AMORTIZATION

- **Amortization is also an expense**

- **Amortization is the amount of an intangible asset is used up during the period.**


AMORTIZATION SCHEDULE FOR MONTHLY PAYMENTS
Number of Years
5
6
7
8
9
10
.0152
.0132
.0117
.0106
.0097
.0108
.0099

- **The credit for amortization directly lowers intangible asset**

- There is no accumulated amortization account.

+278
23
71,23
8
522/4
130,5
Loan
Amortization

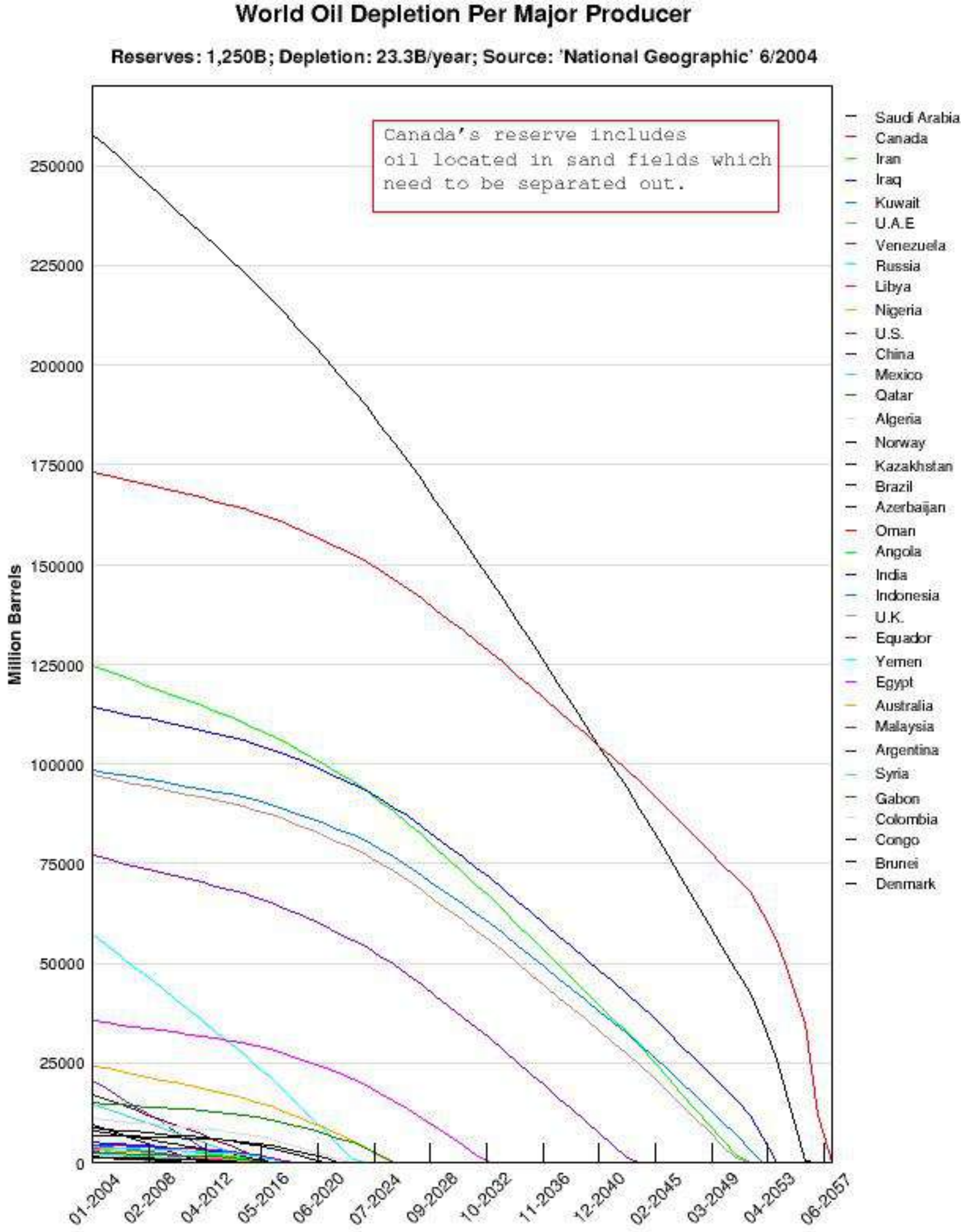
- Bottom line, to be fully amortized, an intangible asset’s total cost will have been allocated to past fiscal periods

3.5.3 Depletion


Asset Management
Monitoring
Research
Transactions
Selection
Risk Management
Planning

- **Depletion is another expense**

- **It is where the amount of a natural resource is used up during the financial period.**


World Oil Depletion Per Major Producer
Reserves: 1,250B; Depletion: 23.3B/year; Source: 'National Geographic' 6/2004
Canada's reserve includes oil located in sand fields which need to be separated out.
Million Barrels
250000
225000
200000
175000
150000
125000
100000
75000
50000
25000
0
01-2004
02-2008
04-2012
05-2016
06-2020
07-2024
09-2028
10-2032
11-2036
12-2040
02-2045
03-2049
04-2053
06-2057
Saudi Arabia
Canada
Iran
Iraq
Kuwait
U.A.E
Venezuela
Russia
Libya
Nigeria
U.S.
China
Mexico
Qatar
Algeria
Norway
Kazakhstan
Brazil
Azerbaijan
Oman
Angola
India
Indonesia
U.K.
Equador
Yemen
Egypt
Australia
Malaysia
Argentina
Syria
Gabon
Colombia
Congo
Brunei
Denmark

- **Book value = Zero**

- They are also contra-asset accounts which get subtracted from other accounts.

EARNINGS BEFORE INTEREST TAXES DEPRECIATION AND AMORTIZATION (EBITDA)

3.6 Intangible Assets (e.g. Patents, Goodwill, etc.)


enter
return
Intangible Assets

- **Intangible assets have no physical form, yet they offer value to the business for a long time.**

- **The total cost of an intangible asset is everything necessary to make it useful.**


Brands
Goodwill
INTANGIBLE
ASSETS
Knowledge
Patents
Trademarks

- **Examples of types of costs that often end up in intangible assets are:**

- **Legal fees, design, artwork, engineering, software, franchise contracts, and marketing programs**

- **FACT:**

- **If the life of an intangible asset is known, such as a franchise term or a copyright limit, then the cost of the intangible asset is spread over the useful life (not legal life)**

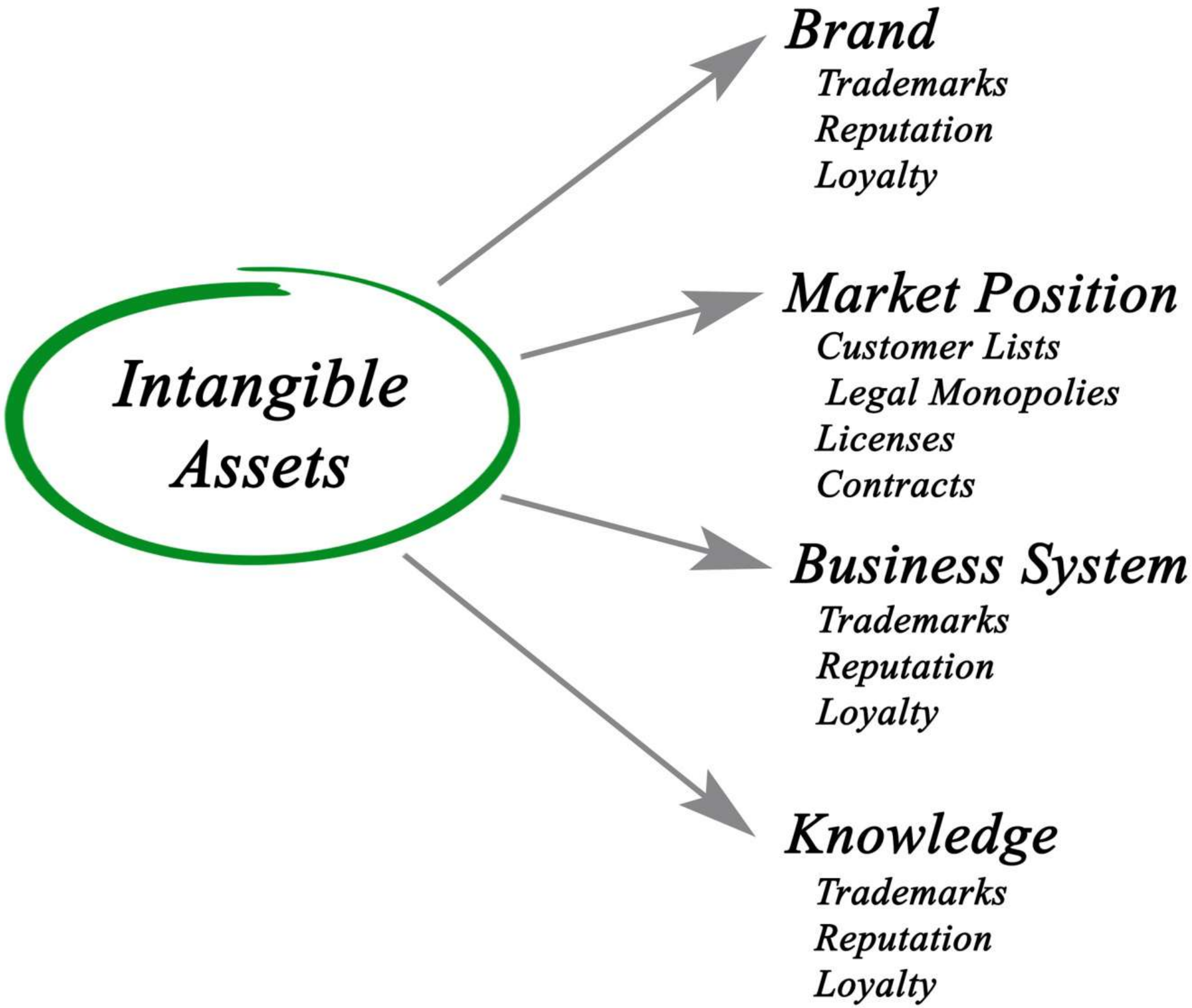

Knowledge
Trademarks
Creativity
Brands
Idea
INTANGIBLE ASSETS
Talent
Patent

- **Some intangible assets have indefinite lives.**

- They are not amortized.
- In the future, if these intangible assets are impaired (lose their value)
- They are written down.
- They are never written up.

- **Patents: The exclusive right to produce and sell an invention.**
- **The legal right may be 20 years, but the useful life may be shorter.**

- **Copyrights: The exclusive right to publish, perform, or reproduce music, art, film, books, or software.**


Intangible Assets
Brand
Trademarks
Reputation
Loyalty
Market Position
Customer Lists
Legal Monopolies
Licenses
Contracts
Business System
Trademarks
Reputation
Loyalty
Knowledge
Trademarks
Reputation
Loyalty

- Legal life can be more than 100 years, but the opportunity to make money from the copyright may be 3 to 5 years.

- Trademarks and trade names: Special identifications that are protected against infringement.
- Many have indefinite lives.

- Goodwill: The extra cost a business pays for another business as recognition for being unusually profitable.
  - It has an indefinite life.

- **Franchises and licenses: Contracts or government grants that give the owner special rights.**
- **Many have indefinite lives.**

3.7 Accounts and Notes Payable


Accounts Payable
2015
2014
Mar
Apr
May
Jun
Jul
Aug
Sep
Oct
Nov
Dec

3.7.1 Accounts Payable

3.7.2 Notes Payable

3.7.1 Accounts Payable

- **Accounts payable, or (A/P), is a liability account.**

- Even though no cash changes hands, Accounts Payable gets credited due to an accrual occurring.

3.7.2 Notes Payable

- Payment on a note is exhibited when a business or a person borrows money

- In writing states a promise to pay in the money back in the future.

- The amount borrowed, or the principal, separate from the interest, if any, is called the Present Value of a Note.
- Once paid, this must be credited on the sheet.


20.01
19.01
16.01
15.01
46 044
44 252
239 677
1 339
195

- A note can be defaulted on.
- All bank agreements require the discounter to guarantee collection on the note.

3.8 Long-Term Liabilities (e.g. Bonds Payable)


CORPORATE BOND
GOVERNMENT BOND
FIXED INCOME
BOND MARKET
MUNICIPAL BOND
HIGH YIELD DEBT
BOND VALUATION

- Liabilities, a core component of the accounting equation as we now know, can often be viewed as Long-Term.

- **Also, as stated, the liabilities possess a separate and important section on the statement.**

- Credits are stored in the liability section, often broken it into two accounts:

- Deferred warranty revenues, as current, and;
- Deferred warranty revenue, as long-term.

- Later, such credits will move to the revenue section as they will not always last as long-term liabilities.

- **Bonds are also within the long-term liability category.**

- **Bonds are a way to borrow large amounts of money from a large number of people.**


Treasury Bonds
bonds (T-Bonds, or

- **The normal four-step process is as follows:**

- **Step 1. A corporation (or a government) prints up a number of paper bond**

- **Step 2. The corporation sells the bonds.**

- **Step 3. The corporation makes regular cash payments on the payment dates**

- **Step 4. On the maturity date, the corporation pays the bondholder the face amount.**


paper
Corporate Bonds
bond is a bond issued by
as to

- **The bondholder is the current investor in the bond.**

- The bond payable account and the discount on bonds payable are both in the long-term debt section of the balance sheet.

- A discount has a debit normal balance because it is a contra-liability account.
  - It represents a reduction of the bond liability.

MR
M−
M+
Municipal
Bonds

- For example, a $1,000,000 bond payable, less a $106,775 discount, represents the bond book value, or the true liability, of $893,225 (100,0000 – 106,775).

- **If the company wanted to eliminate this debt, it could buy the bonds back for the same price of $893,225.**


Bonds
100
100

3.9 Owner's Equity


BALANCE SHEET
owner's equity
net worth
inventories
shareholder
property
cash
corporation
bondholders
stock
formula
capital
comparison
assets
year
equipment
expenses
financial
accounting
summary
receivables
cost basis
money
business
future
liabilities
unearned
revenue
position
snapshot
finance
periods
services
acquire
partnership
earnings
tax
withdraws

- Owner’s equity is the official name for the owner’s claim on the assets in the business.

- **The statement of owner’s equity contains net income from the income statement, and that number covers a period of time**

- Therefore, the statement of owner's equity covers the same period of time as the income statement.

The equation of the statement of owner's equity is always the same:

3.10 Preferred and Common Stock


Stock certificate
Common stock
Preferred stock
STOCK MARKET
Stock exchange
Registered share
Voting share

3.10.1 Preferred Stock

3.10.2 Common Stock

3.10.1 Preferred Stock


PREFERRED STOCK

- Corporations may wish to attract more cautious investors by issuing preferred stock.
- Preferred stock is stock with special privileges.

- Corporations have total freedom to mix and match these privileges to suit investors.


Moody's

- **Preferred stock commonly has a steady price**

- **It does not go up when the corporation does well, nor does it drop much when the company does poorly.**

- **Preferred stockholders usually do not get to vote in stockholder meetings**

NUMBER 383

100 SHARES

THE COLUMBUS SOUTHERN Railway Company.

This Certifies that ______________________ *is the holder of One hundred shares of the full paid Preferred Capital Stock of* THE COLUMBUS SOUTHERN RAILWAY COMPANY, *of the par value of One Hundred Dollars each, transferable only on the books of said Company in person or by Attorney upon surrender of this certificate.*

This preferred stock shall be entitled to receive from the net earnings of the Company dividends not exceeding five per centum per annum, non-cumulative in any fiscal year that the Company may have net earnings applicable to dividends before any dividend whatsoever shall be declared on the Common Stock; and whenever the net earnings applicable to the payment of dividends shall be in excess of the sum required to pay a dividend of five percent on the Preferred and Common Stock for the current year, such surplus shall be divided pro rata between the Preferred and Common Stock.

PREFERRED

100 SHARES

$100 EACH

In Witness Whereof *the said Company has caused this certificate to be signed by its President and Treasurer this* ________ *day of* ________________ *18* ____

______________________ *Treasurer*

______________________ *President*

SHARES $100 EACH.

- **Examples of privileges for preferred stockholders are:**

- The first right to cash dividends before common stockholders

- **The right to participate in corporate profits the same as common stockholders**

- The right to be paid dividends in arrears if years go by without paying a dividend

- The right to convert preferred stock into common stock


PAY

3.10.2 Common Stock

- **Corporation law grants to common stockholders certain rights:**

- **Right to vote**

- **Right to share in dividends**

- **Right to a certain percentage of the corporation upon liquidation**

- **The preemptive right, which is the choice to buy a portion of each new issuance of stock in order to maintain the same ownership percentage**

- **Common Stock:**

CERTIFICATE FOR LESS THAN 100 SHARES

COMMON STOCK

NUMBER A265068

SHARES 5

The Baltimore and Ohio Railroad Company

Incorporated by the State of Maryland, February 28, 1827.

This Certifies that Joost, Patrick & Co

the owner of FIVE *shares of the par value of One Hundred Dollars each, full paid and non-assessable, of the Common Capital Stock of The Baltimore and Ohio Railroad Company, transferable only on the books of the Company at its transfer office by the holder hereof in person or by duly authorized attorney, upon the surrender of this certificate. The holders of Preferred Capital Stock to the amount of Sixty Million Dollars ($60,000,000) now issued and such additional amounts as may be lawfully issued from time to time by the President and Directors of the Company pursuant to the resolutions of the stockholders duly adopted April 11, 1899, are entitled to receive in each year out of the surplus net profits of the Company for the current year such yearly dividend (non-cumulative) as the Board of Directors of said Railroad Company may declare up to but not exceeding four per centum, before any dividends shall be set apart or paid upon the Common Stock. In Witness Whereof, the said Company has caused this Certificate to be signed by its duly authorized officers this* OCT 14 1927

REGISTERED BANKERS TRUST COMPANY, REGISTRAR

ASSISTANT SECRETARY

OCT 15 1944

ASST. TRANSFER AGENT

FOR THE PRESIDENT

FOR THE SECRETARY

International Bank Note Co. New York

SHARES $100. EACH

- Every corporation must have common stock.
- Common stock represents the basic ownership of a corporation.

- Sometimes corporations issue a second class of common stock (normally called Class B Common Stock) with different rights than Class A Common Stock.


S&P500

3.11 Retained Earnings


RETAINED
EARNINGS

- **Retained earnings are located in the equity account in a corporation**

- **Retained earnings contain all the earnings all the corporation has ever earned**

- **However, they have not yet distributed to stockholders.**

3.12 Liquidity, Solvency, and Activity Analysis

3.12.1 Liquidity Analysis

3.12.2 Solvency Analysis

3.12.3 Activity Analysis

3.12.1 Liquidity Analysis


Liquidity Ratio

- Liquidity is defined as the ability of a company to meet its financial obligations as they come due.

- **It also allows for a capability to sell assets quickly to raise cash.**

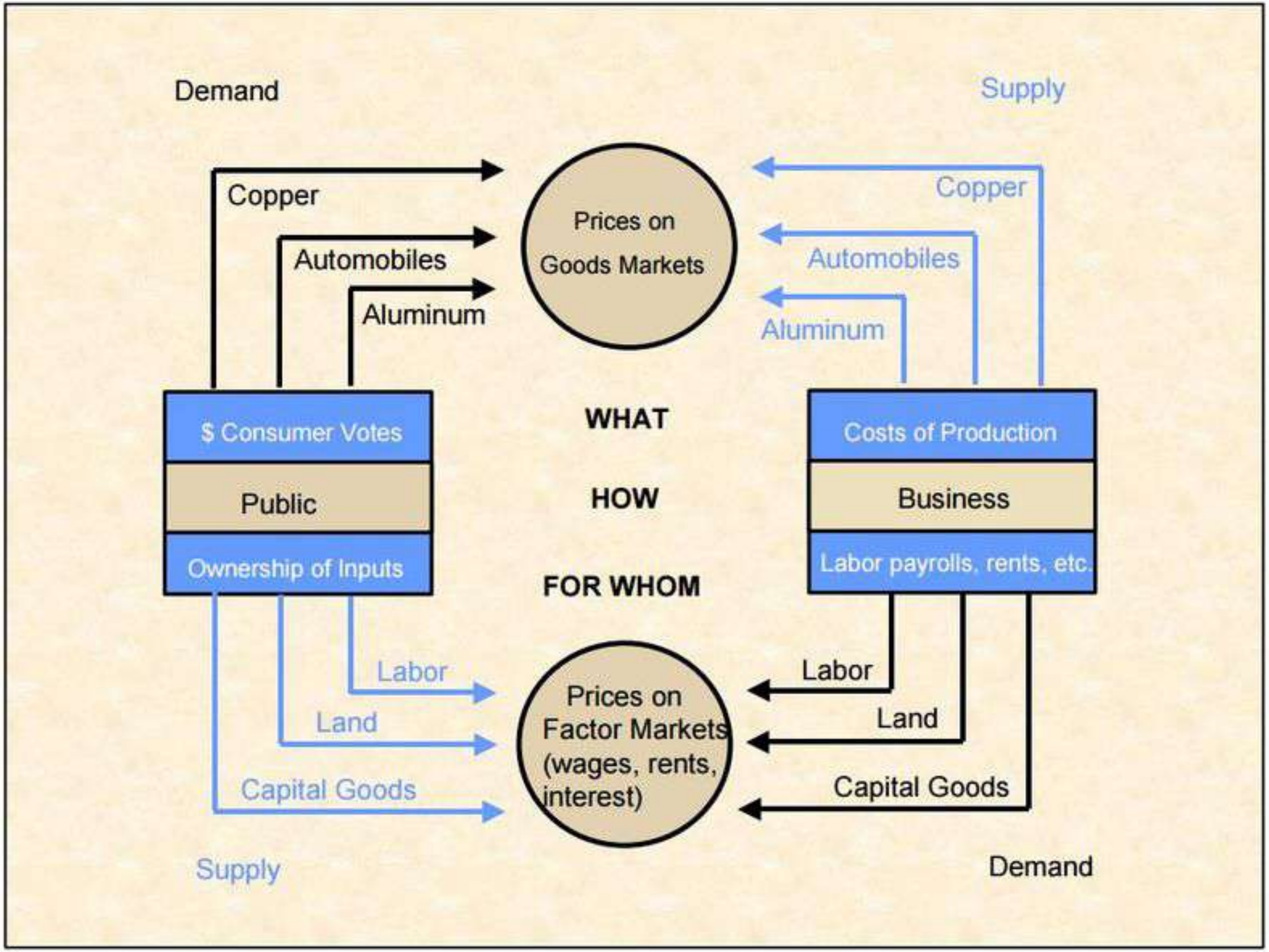
- **An analysis of liquidity, or the ratio of paying all financials outright, is a computation.**

- **This computation is used to measure a company's ability to pay its short-term debts.**

- **Investors often take a close look at liquidity ratios when performing fundamental analysis on a firm.**

- If a company is having trouble meeting its short-term debt, it is at a higher risk of bankruptcy.

- **Liquidity ratio analysis are a good measure of whether a company will be able to continue as a operational entity.**



Demand
Supply
Copper
Automobiles
Aluminum
Prices on
Goods Markets
Copper
Automobiles
Aluminum
$ Consumer Votes
Public
Ownership of Inputs
WHAT
HOW
FOR WHOM
Costs of Production
Business
Labor payrolls, rents, etc.
Labor
Land
Capital Goods
Prices on
Factor Markets
(wages, rents,
interest)
Labor
Land
Capital Goods
Supply
Demand

3.12.2 Solvency Analysis

SOLVENCY

- Solvency is the ability of a company to meet its long-term financial obligations, primarily, as opposed to short-term.

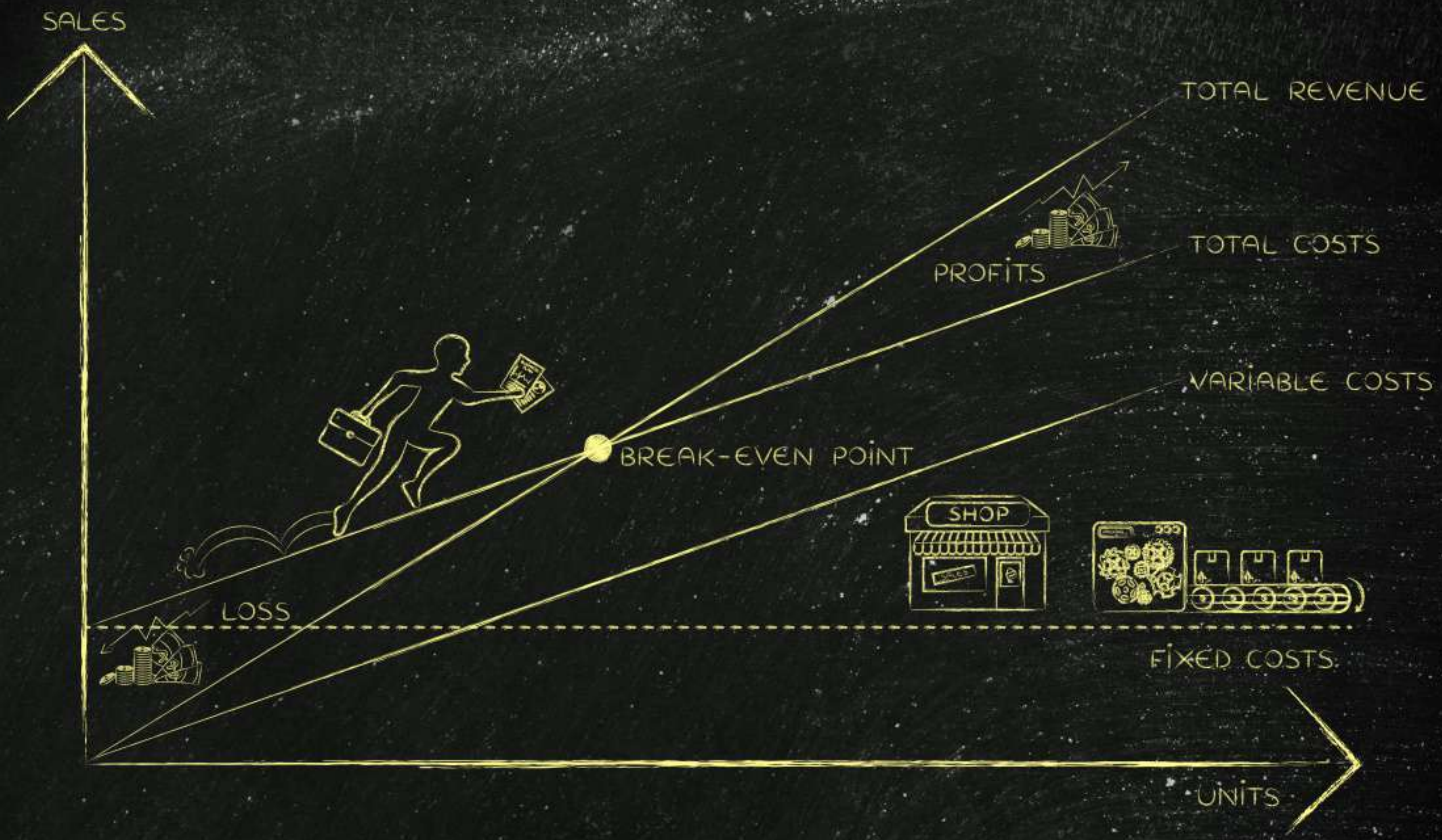
- **The Analysis of Solvency is used to measure an enterprise's ability to meet its debt obligations.**

- **The solvency ratio analysis indicates whether the lower a company's solvency ratio, the greater the probability that it will default on its debt obligations.**

- **The measure is usually calculated as follows:**

- Solvency Ratio = Net Income + Depreciation
  - Divided by
- Short-term Liabilities + Long-term Liabilities

3.12.3 Activity Analysis


SALES
TOTAL REVENUE
TOTAL COSTS
PROFITS
VARIABLE COSTS
BREAK-EVEN POINT
SHOP
LOSS
FIXED COSTS
UNITS

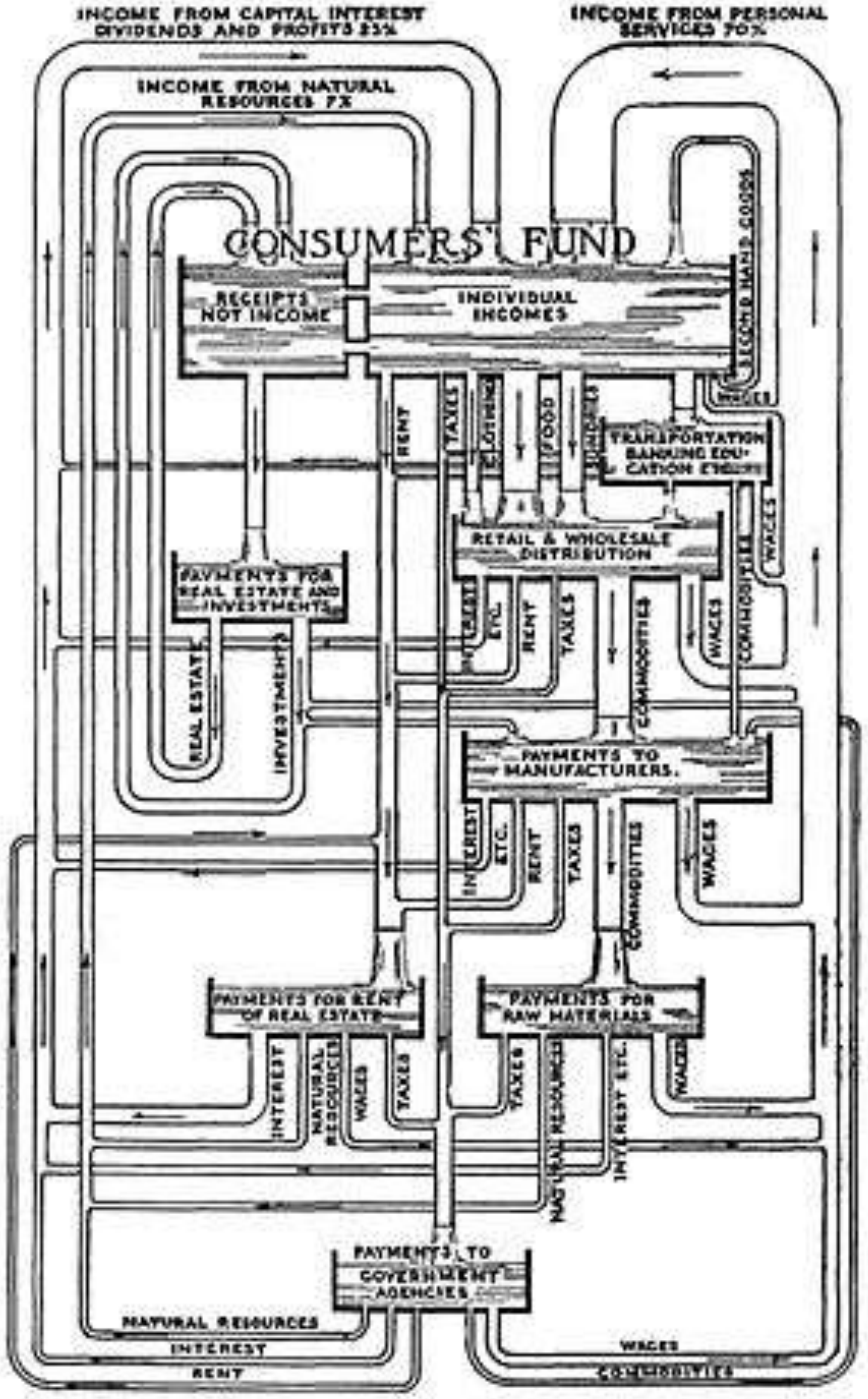
- **Activity ratios are financial analysis tools**

- **Measure the ability of a business to alter various asset, liability and capital accounts into cash, or sales.**


Capital
Surplus

- The faster a business is able to convert its assets into cash or sales, operations run better.

THE CIRCUIT FLOW OF MONEY



POLLAK FOUNDATION

3.13.1 Summary

Inventory Valuation:

The dollar amount associated with the items contained in a company's inventory

- **Can be separated into the cost of the items in place and ready for sale.**

Inventory valuation will include the costs of:

- **Production**
- **Materials**
- **Labor**
- **Overhead**

- **Methods to Track Inventory: Two Primary**

Periodic inventory method:

- **keeps track of merchandise costs in various purchases, then computes cost of goods sold on the income statement.**

Perpetual inventory method:

- **increases the inventory account with every purchase, and lowers the inventory account with every sale.**

3.13.2 Summary

Days in Inventory:

- Measures the average number of days before merchandise sells.

Inventory turnover:

- Measures the number of times inventory completely sells per year.

FIFO:

- Accounting method: first in, first out
- Cost of inventory on balance sheet represents the inventory most recently purchased
- Oldest items recorded sold first, yet may not have been sold

LIFO

- Last in, first out
- Most recently produced items recorded as sold first (Costs of Goods Sold attributed)
- Only allowed in US; GAAP APPROVED

Exam:

In a period of rising prices, which of the following inventory methods results in the highest cost of goods sold?

(A)FIFO
(B)LIFO
(C)Average cost
(D)Periodic inventory
(E)Perpetual inventory

Exam:

An inventory valuation method such as FIFO or LIFO affects?

(A) the cost of goods sold but not the balance sheet

(B) the balance sheet but not the cost of goods sold

(C) both the income statement and the balance sheet (CGS is located on IC)

(D) neither the income statement nor the balance sheet

(E) the cost of goods sold but not the income statement