



# CHARTERED WEALTH MANAGER <sup>TM</sup>

CWM<sup>TM</sup> Chartered Wealth Manager - Study Guide

## CWM<sup>TM</sup>

Prof. Dr. George S. Mentz, JD, MBA, CWM<sup>TM</sup>, CAM<sup>TM</sup>, CTEP<sup>TM</sup>

Formal Study Guide for Executive Course for Wealth Management Board  
Certification and Designations of: CWM<sup>TM</sup> RFS<sup>TM</sup> CAM<sup>TM</sup> MFP<sup>TM</sup> & CPM<sup>TM</sup>

# CWM™ Chartered Wealth Management Study Manual

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## Developing A Wealth Management Plan

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Any financial planning including retirement decision-making should be based upon the six steps of the wealth management process.

### **1. Identify and Clarify the Current Situation**

This first step involves data gathering and a review of quantitative information such as the investors total assets and liabilities which comprise the net worth statement, statement of income and expenses, life, disability and other insurance policies, important documents such as: tax returns, wills, powers of attorney, investment portfolio and transactions, shareholders agreements, employee benefit booklets, trust agreements, pension statements, and some basic family history such as name, age, marital status, employment history or details of a family business, details of the children's birth dates and other qualitative details.

Essentially this step summarizes where the client is today. An individual's current situation is a result of the cumulative effects of all of the financial decisions and transactions that have occurred in the past up until the current time.

### **2. Identify Goals and Objectives**

This step seeks to identify both financial and personal goals and objectives. After identification and listing, the goals and objectives need to be prioritized, to facilitate the allocation of the available resources to the most critical concerns. It is of primary importance that the financial goals are measurable, in order to track success and to provide feedback so that strategies can be fine-tuned.

Goals must be:

- **Specific**. Otherwise, they are not goals, they are merely dreams. "I require \$500,000 by my 65<sup>th</sup> birthday" is an example of a specific goal. "I want to be rich when I retire" is a dream not a goal.
- **Measurable**. Financial goals are easily measurable since dollars and cents can be counted.
- **Attainable**. Goals must be securable.
- **Realistic**. In order for a goal to be achieved, it must be within the realm of reason. To accumulate \$1 million by age 65, if one is currently age 64, and has no savings may be attainable by winning a lottery however; this is unrealistic.

Conversely, for a 25-year-old to accumulate \$1 million by age 65 through saving and investing is probably both attainable and realistic.

- Time bound. All goals should be time bound in order to track progress towards the goals completion and to provide feedback. Corrections should be made in the action plan therefore maximizing the probability of success.

If goals are determined to be unattainable and/or unrealistic, the individual can:

- reduce discretionary expenditures,
- increase income,
- choose more aggressive investments, with potentially higher investment returns,
- increase the timeframe over which to obtain the goal, or
- reduce the dollar value of the goal.

### **3. Analyze Problems and Opportunities**

An analysis of the current situation will allow for the identification of additional opportunities that can be exploited in order to more efficiently accomplish the specified financial goals. Moreover, the situational analysis will help to identify problems that may be acting as obstacles or preventing the most efficient accomplishment of the identified objectives. Problems must be identified before solutions can be established.

It is in this stage of the wealth management process that the use of various mathematical tools is most powerful.

The answers to questions like “should I pay off my mortgage or contribute to my RRSP this year?” are not straightforward. The answer will depend upon each individual’s situation, and the assumptions that the individual makes such as the interest rate, the rate of inflation, and the chosen investment vehicles. It is imperative that the economic assumptions upon which the financial plan will be based be set by the individual (with input from the financial adviser). It is therefore necessary that some basic understanding of the interrelationship of key economic information and investment performance be acquired in order to make educated or enlightened financial decisions.

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## **4. Develop Solutions**

If sufficient analysis has been performed in the previous step of the process, the development of solutions is straightforward.

## **5. Implementation**

This step involves putting the financial plan into action. An action plan should be created with appropriate strategies and tactics outlined in writing.

## **6. Monitor and Review**

The final step in the wealth management process is the ongoing monitoring that is required in order to fine-tune the financial plan and to ensure the successful attainment of the specified financial objectives. Regular reviews and updates allow any plan, which has gone off track to be quickly, set back “onto the rails”.

Regular review allows for any changes in an individual’s lifestyle or in the economic environment to be reassessed. Additionally, a review allows the opportunity to provide for any changes to strategies or tactics, which might be required.

## **The Critical Disciplines**

There are six fundamental subject areas or critical disciplines which must be interwoven into a plan for early retirement. The critical disciplines are the basic areas of knowledge upon which any financial plan must be based. These foundations are the essence of the plan. Each subject area overlaps another and weaves itself throughout the wealth management process.

### **1. Tax Planning**

Tax planning is important and is integrated throughout all of the disciplines. Tax will have a major impact upon an individual's goals and the accomplishment of those goals.

### **2. Cash and Credit/Debt Management**

Most individuals must use credit to build their net worth. This creates cash management concerns.

### **3. Retirement Planning**

It is never too early to commence retirement income planning. In fact, the earlier one starts to accumulate retirement funds, the easier the goal is to achieve in the end.

### **4. Investment Planning**

A major part of building a portfolio for net worth or creating retirement funds involves investment.

### **5. Insurance and Risk Management**

The majority of individuals insure their homes and vehicles. Additionally, insuring ones life and protecting the continuity of the individual's income stream is critical.

## **6. Estate Planning**

Estate planning includes providing for heirs and protecting loved ones through prudent estate pre-planning and the minimization of income taxes. Special concerns of family owned businesses involve succession planning and the desires and the abilities of the heirs to successfully assume control.



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# Investment Vehicles

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## Fixed Income Investments

### **1) *What is the difference between bond types and bond features?***

Features are contained in the bond indentures e.g. a call provision or sinking funds. Conversely, types of bonds include collateral trust bonds, mortgage bonds and equipment trust certificates. The type of bond determines what is collateralized, how it is secured and what rights the bondholders have. For example, a mortgage bond collateralized by a building would require a legal proceeding in the event of default. An equipment trust certificate, on the other hand, is collateralized by rolling stock. Title to the rolling stock remains with the certificate holder until the debt is repaid. In the event of default, the process of collection is streamlined, since title to the assets already rests with the certificate holders. No lien is required.

### **2) *Are there any restrictions on the ownership of Savings Bonds?***

Yes. According to Some Countries a buyer must have a permanent residence in the country and been in residence for a specific time. Bonds may generally be held by estates, charitable organizations, sole proprietorships, personal trusts, and retirement plans. Corporations and mutual funds do not normally purchase these investment.

### **3) *Who buys junk bonds?***

Due to the nature of this investment, buyers should be prepared for volatility and the higher risk potential of this type of bond or debenture investment. The junk bond purchaser should expect the same type of volatility as with an equity investment. The incentive to participating in this type of investment is the very attractive yields. For the average investor, a junk bond mutual fund offers diversification as well as management expertise.

### **4) *What is a tranche?***

A tranche occurs when a bond has a series of maturity dates. Each maturity date is called a tranche.

### **5) *What is meant by a bond yield?***

Bond yield can be calculated in two ways. Current yield is calculated as the annual interest payments expressed as a percentage of current market price. The yield to maturity takes into account both the annualized interest payment and also the capital gains or losses that will be experienced by the bond, if held until maturity.

**6) How does an investor calculate cash flow?**

Cash flow can be approximated from the Income Statement. It can be calculated by taking net income before extraordinary items plus depreciation or amortization or depletion, plus the increase in deferred income taxes, plus minority interest, minus equity income.

**7) How can an investor judge the quality of a bond?**

Analyses of the financial statements provide a simple method of judging the quality of most investments. Financial statement analysis looks at relationships between Balance Sheet and Income Statement accounts. Some classic ratios for analyzing bond investments are: the debt to equity ratio, the times interest-earned ratio and the asset coverage ratio.

**8) What sweeteners can an issuer offer to both bond or preferred stock investors?**

Convertibility, retractability, floating rate, or warrants.

**9) What is “tilting of the yield curve”?**

The yield curve tilts when long term interest rates fall and short term interest rates rise.

**10) How is accrued interest, that has not been received by an investor, treated for income tax purposes?**

Some Revenue Authorities require that accrued interest be taxed in the year it is accrued, which may not necessarily be when it was received.

**11) What are the main factors that affect bond prices?**

The main factors which affect a bond's price are the credit rating of the issuer, the coupon interest rate, the term to maturity and the level of interest rates in the economy.

**12) Why are federal government securities considered to be risk free?**

Federal government debt obligations consist of marketable bonds, non marketable CSBs and Treasury Bills. Additionally, the federal government guarantees certain Crown Corporation debt. These debt instruments are backed by the full taxing authority of the federal government which means that there is virtually no chance of default. In addition to guaranteeing the principal, the federal government also guarantees the interest rate.

**13) Why would an investor choose a Mortgage Backed Security over a term deposit or a GIC?**

Although all of these investments pay approximately the same interest rate, there is a secondary market in MBS which translates into greater liquidity for the investor.

## **Real Estate**

**1) Why should real estate be part of my portfolio?**

Research studies show that real estate offers a long term, attractive real rate of return and act as a hedge to inflation. Commercial real estate has a lower standard deviation of returns (risk) than stocks or bonds. Most importantly the returns on real estate investments are not highly correlated with the other asset classes, which results in improved diversification in a portfolio.

**2) Does real estate always increase in value?**

Various studies show that real estate, like inflation, tends to follow long term trends. Factors which affect the value of real estate include supply, demand, and the nature of the property itself. Investors can lose money in real estate because they do inadequate research or are overly optimistic.

## **Equities**

**1) How do I know if my fund manager is doing a good job?**

Research indicates that only about one third of U.S. mutual fund managers outperform the benchmark portfolio after factoring in expenses and risk. This same research also concludes that mutual fund performance is inconsistent, which means that a top performing fund in one year isn't necessarily the top performer in the following year. Studies indicate that although professional money managers can outperform the index, the costs to find these opportunities can most often be greater than the additional returns.

## **2) What is a stock index?**

An index has a number of different purposes. It can be used to measure the average performance of a group of stocks. An index is also used to perform analysis on the whole asset class of equities because the index serves as a market portfolio. The market portfolio is a tool to measure beta and systematic risk. There are two common types of indexes:

1) Price Weighted Average - This average is calculated using a simple average. Prices of stocks are added together and divided by the number of stocks comprising the average. The most famous price weighted average is the Dow Jones Industrial Average (DJIA). Another example is the Nikkei-Dow Jones Average in Japan.

2) Market Capitalization Weighted Index - This index measures the daily percentage change in total market capitalization of each stock. The price changes of the companies with the highest market capitalizations dominate the performance of the index. Examples of this type of index include the TSE 300, the S&P 500, the Financial Times Actuary, and the FTSE 100 (London).

## **3) What is the difference between a stock and a bond?**

Bonds represent a liability of a company while each share of stock represents ownership. Bonds always trade over-the-counter while stocks may be traded over-the-counter or on an organized stock exchange.

Stocks earn dividends and capital gains, while bonds earn interest and have the possibility of earning capital gains.

A bond is generally considered to be a safer investment than a stock.

## **4) What is cyclical stock?**

A cyclical stock is a stock that is sensitive to changes in economic conditions.

## **5) When is a bond negotiable?**

When it is in a form that can be transferred between two investors.

## **6) What types of mutual funds can an investor purchase?**

Money market, mortgage, bond, real estate, dividend, balanced, growth, international, global and specialty funds. Specialty funds can include asset allocation funds, ethical funds, segregated funds, LSVCC's and speculative or hedging funds.

**7) How would an investor calculate the purchase price of a front end loaded mutual fund?**

The purchase price equals (net asset value) divided by (1 - % load).

A fund selling for \$12.00 with a three % load has a purchase price of (\$12.00) divided by (1-.03) =  $12/.97 = \$12.37$ .

**8) What is meant by a cyclical or a defensive stock?**

Defensive stocks operate in industries that are not affected as dramatically by economic changes. Defensive stocks are companies which have stable earnings and continuous dividend history. Conversely, cyclical stocks are very sensitive to the underlying economic conditions and they usually have highly volatile earnings.

**9) How should an investor go about building their investment portfolio?**

An investor should first decide on their goals which are used to help establish written investment objectives, including a risk tolerance assessment. The next step is to set the asset allocation amongst the various asset classes which maximizes the portfolio return while minimizing the investor's risk. Once the portfolio is built, it must be regularly reviewed and monitored to ensure that the portfolio continues to meet the investor's changing needs.

**10) What techniques are available to an investor for allocating funds amongst asset classes?**

One can use strategic asset allocation, a passive portfolio management technique, which sets the long term mix for a particular investor. Tactical asset allocation is an active management technique which allows for discretionary, opportunistic deviations from the long term strategic allocation. Dynamic allocation, an active investment management technique, permits a great deal of discretion and allows the investor to pursue the most profitable opportunities. An integrated asset allocation approach can include all of the above methods.

## **Derivatives**

### **1) *What is the difference between speculation and hedging?***

Hedgers either own a commodity or will need to purchase a commodity for business purposes at some point in the future. Hedgers therefore have positions or needs in the cash markets and they use derivatives to pass these price risks along to speculators. Speculators are willing to bear large risks in exchange for the potential to earn significant returns. It is common for speculators to use margin accounts and leverage in order to magnify their gains. Speculators use naked positions which means that they do not own or have a need for the physical commodity.

### **2) *What is portfolio insurance?***

Portfolio insurance is known as a protective put strategy. The strategy involves buying a stock and buying a put. What this strategy does is to put a minimum floor under the portfolio with unlimited upside potential. The tradeoff is that the investor has to pay a premium for the put. This can be considered as the premium on the insurance.

### **3) *What is a covered writer?***

A covered writer is the seller of an option who owns the underlying stock.

### **4) *What type of investor would be interested in LEAPs?***

LEAPs would appeal to an investor interested in options but who desires a longer term investment horizon. LEAPs can go out up to three years.

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## **Tangibles**

### ***1) How do I make a market in baseball cards?***

Have a garage sale! Many collectibles are not going to have an active secondary market in which the collectibles can be bought and sold. In order to liquidate a collection, which has no formal market, the investor might have to become a market maker. This can be achieved by having a garage sale which meets the technical definition of a call market!

## **Foreign Investments**

### ***1) What are benefits of international diversification?***

Investing globally means that an investor has more investment options available to choose from.

Another benefit of international investment is the potential for higher returns. The correlation between domestic and foreign investments is low. Diversification is best achieved by combining assets with negative or low correlations. Combining assets that are highly correlated does not reduce risk. Warning! The research suggests that global diversification must be done carefully, considering regional factors. For example, the stock markets are highly correlated to the U.S. markets which means that combining U.S. stocks and stocks results in a minimal reduction of risk, unless a very careful analysis is performed.

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## Basic Economic Concepts: Economics For The Wealth Management Professional

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An understanding of the national and international economic environment is very important in preparing to make and implement financial decisions. The following basic economic concepts will help the investor to comprehend the economic environment before committing to a retirement or investment plan.

### Gross Domestic Product and Gross National Product

Gross domestic product (GDP) is a measure of the goods and services produced by labor and property that is **a specific country**. For the purposes of the GDP calculation, it does not matter whether residents own the resources; it matters only that the labor and other resources are **located** in a specific country. GDP is the most common measure or international standard of national economic performance that is used by governments and economists worldwide.

Gross national product (GNP) is a measure of the goods and services that are produced by labor and property that is **supplied by residents**. It does not matter whether or not the laborers or the property is actually located in , so long as the resources are **owned** by Residents.

Since there is more foreign investment in many countries than there is investment abroad, GDP is much larger than in some countries than GNP. By way of contrast, for the U.S., GDP and GNP are nearly identical.

The economy's ability to produce is measured by its potential GDP. The growth in potential GDP is a function of:

- The growth rate of the labor force. The growth rate of the labor force is determined by demographics (birth rate, death rate, and immigration), and labor force participation rates (the percentage of the population that chooses to work).
- The growth rate in the number of hours worked per worker. The growth rate in the number of hours worked is determined by societal attitudes towards work and leisure.
- The growth rate of productivity. Productivity growth rate is a function of the technology used, innovation, social attitude, competition, resource utilization, and the skill of the labor force.



## Supply and Demand

The demand for a product is defined as the quantity of the product which consumers are willing to purchase.

Factors that affect the demand relationship of a product include:

- The price of the product. Generally, the higher the product is priced, the lower the quantity demanded by consumers.
- Consumer income. The higher the consumer's income, the more goods the consumer will demand.
- The price and availability of related goods. If attractive substitute products are available at a lower price, less of a product will be in demand.
- Consumer expectations. If consumers expect product prices to rise, the more of the product they will demand now.
- Advertising. Effective advertising can promote and expand demand for the product of a company, or advertising can expand the marketplace for an entire industry.
- Demographics. As the population demographics change over the years so do consumer tastes and the products that they consume.

The demand curve for a product portrays the important relationship that exists between the quantity of a product that would be purchased and the prices that are charged for the product. Movement along the demand curve reflects a change in the quantity demanded. For example when prices decline, the quantity of the product demanded by consumers will increase. This is called the law of demand, and explains why demand curves normally slope downward and to the right. When the demand curve shifts, this is known as a change in demand. Change in demand is caused by some factor other than price.

The price elasticity of demand refers to the responsiveness of the quantity of goods that are demanded in relation to changes in the price of the product. Most products have elastic demand. Demand is said to be elastic when a given change in price produces a greater percent change in the quantity of the product that is demanded. The elasticity of demand is determined by the availability of substitute products and the percentage of the consumers total budget that is spent on the product. Necessities, in general, tend to be more inelastic than luxury goods. Gasoline represents a good example of a product with elastic demand. On the other hand, some products will be in demand no matter what the price; for example, insulin, which is used by diabetics. If the price of insulin were to double, in all probability the quantity of insulin demanded would remain constant. This situation is known as inelastic demand.

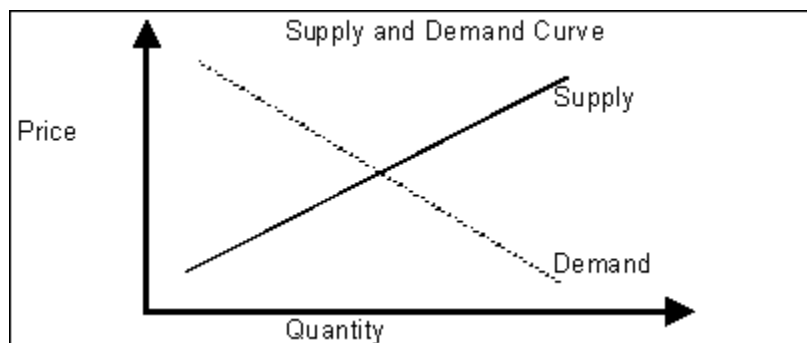
The supply of a product is defined as the quantity of the product which producers or manufacturers are willing to produce and sell.

A change in supply is different from the change in the quantity supplied. A **change in the quantity supplied** occurs when the price of the product itself changes, and this change is depicted as a movement along the existing supply curve. A **change in supply** occurs because of factors other than price. A change in supply is reflected by a movement or shift, of the entire supply curve, up or down.

The factors that affect supply changes, and which can shift the supply curve include:

- A change in the price of the inputs of production such as raw materials, labor, or capital.
- Changes in production technology such as the use of additional or more efficient machinery or production methods.
- Changes in fiscal or monetary policy such as the imposition of taxes or other incentives or disincentives introduced by governments.
- Natural disasters such as fires, floods, ice storms, or tornadoes which reduce the availability of goods on hand and may interrupt production schedules.

Profit is the major determinant of a supply curve. Therefore, a major factor that affects the supply curve is production cost. The law of supply says that, in the short run, producers will manufacture more of the product at higher prices. Supply curves normally slope upward and to the right. This relationship exists because companies will only produce more of a given product if the price at which they can sell the product covers the cost of production and yields a profit.



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## **Interest Rates and Yield Curves**

Arguably, interest rates are the singular most important factor, which affect securities markets and investments. Interest rates can be thought of as the cost or price of money and therefore, interest rates have a powerful effect on the Way a specific countries' economy as follows:

- The cost of capital, which impacts on business investments and capital spending. A decrease in interest rates will often encourage business to expand by increasing production capability and modernizing manufacturing facilities with funds borrowed at a low interest cost.
- Current consumer consumption. Low and falling interest rates encourage consumers to spend now and therefore to increase their current consumption of goods and services particularly relatively expensive goods such as automobiles and appliances.
- Savings rates of individuals. Rising interest rates encourage consumers to save rather than to consume.
- The discretionary spending habits of consumers. Rising interest rates increase the cost of borrowing thereby increasing debt servicing costs. Rising debt service cost means that there is less discretionary income to be used for current consumption.

The level of interest rates in a closed economy that does not engage in trade with foreigners, is determined primarily by the supply and demand for credit (loanable funds). The supply of loanable funds is determined by savers who invest their money, which is then, in turn, loaned to consumers. The willingness to save is based upon the individual's willingness to trade current consumption for future consumption. The price demanded for this tradeoff is the interest rate.

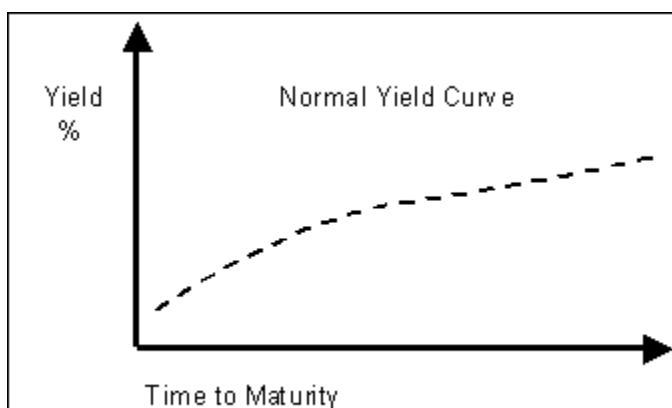
The demand for loanable funds is a function of the desire for current consumption, and the lower the cost or interest rate, the greater the demand for loanable funds.

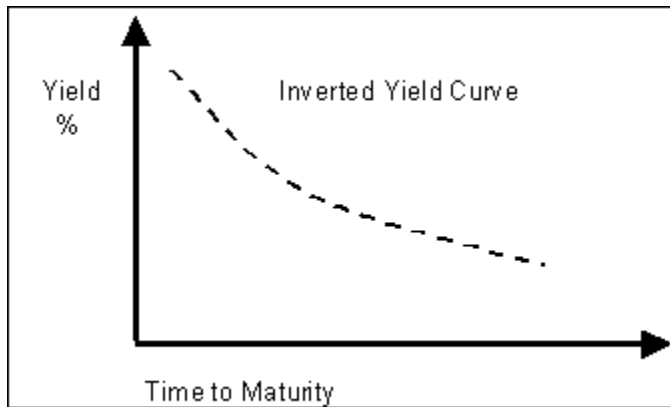
Creditors will consider a debtor's credit risk in establishing the interest rate to be charged. Specifically, the higher the risk of default the higher the interest rate charged. Additionally, if a creditor believes that inflation will rise over the term of the loan, the nominal interest rate charged for the loan will be increased so that the debt will be repaid in real dollars.

In a free market open economy which engages in international trading, the level of interest rates, in addition to the domestic supply and demand factors just discussed, is also impacted by:

- Central bank operations. Central banks can influence short-term interest rates through money-market operations.
- The foreign exchange rate. If interest rates are higher in the U.S. than in , investment funds will flow to the U.S. (money goes where money grows) which may force the Bank of to protect the currency by raising short-term interest rates.
- Central bank credibility. If central bank policy is to keep inflation low and under control, interest rates can remain low.

The yield curve is a graphic representation of the relationship that exists between short and long-term interest rates at different points in time over the business cycle. Changes in the level of interest rates can dramatically affect both the price and the demand for debt securities. The bellwether or benchmark that is used to establish the level of interest rates in a Specific Country's economy is the federal government's treasury bills (T-bills) and bond issues. Under everyday and commonplace conditions, usually long-term interest rates are higher than short-term interest rates. When interest rates are plotted on a graph against the term to maturity, the resulting depiction of the term structure for interest rates is known as a normal yield curve. When short-term rates are higher than long-term rates, the yield curve is said to be inverted. The yield curve will often be inverted at the peak of an economic cycle because the Bank of will attempt to slowdown the pace of economic activity by manipulating short-term interest rates upwards, through its intervention in the money-market and other open market operations.





The term structure of interest rates is described by different theories, which attempt to elucidate the shape of the yield curve.

- *Segmented market theory*. This theory states that different participants in the bond market tend to concentrate their activities into the particular maturity segments, which most closely match their needs. Although this theory can explain any shape of yield curve, it is based on the unrealistic assumption that the market participants will **never move out** of their preferred segment no matter what the interest rate.
- *Preferred habitat theory*. This theory states that investors and borrowers prefer to invest in certain maturity segments along the yield curve. The theory states that investors will shift out of their preferred maturity segment (habitat) if they are rewarded for the risk of doing so, by higher interest rates.
- *Pure expectations theory*. This theory states that the yield curve adjusts to the participants expectations regarding what the market believes that interest rates will be in the future. If the market expects interest rates to rise, the yield curve should be positively sloped and if the market expects that interest rates will fall, the yield curve will be inverted.
- *Liquidity theory*. The liquidity theory is based upon an investors aversion to risk. This theory states that short-term rates should be lower than long-term rates because the long-term bond rates must include a premium for their lack of liquidity. The liquidity theory claims that the yield curve should therefore, always be positively sloped.
- *Biased expectation theory*. This theory combines both the pure expectations and liquidity theories. This theory can explain any shape of yield curve and because of the liquidity preference there is a natural bias towards a positive slope.

## **Inflation**

Most people define inflation as the persistent rise in the cost of living over time. The most common measure of inflation is the consumer price index (CPI). The CPI measures the cost each month to buy a basket of consumer goods. This basket of goods supposedly represents the same goods that typically would be purchased by an average family. The calculation of the CPI assumes that the same type and quantity of goods are purchased each month or each year, and the price of this basket of goods is compared and measured relative to a predefined base period. Another important indicator of inflation, are the settlements of collective agreements for unionized employees wage demands.

The economic consequences of inflation include:

- The erosion of the standard of living of those collecting and living on fixed incomes.
- Debtors benefit since loans are repaid with cheaper future dollars.
- Higher interest rates, which often translate into recessions.
- A transfer of wealth from the public to the government, if the government is a major debtor, and if the tax system is progressive and it is not indexed to inflation.

## **Unemployment**

One of the goals of economic policy is to produce and maintain full employment. Full employment does not mean zero unemployment. There will always be a certain number of unemployed persons in the economy for various reasons.

- Fictional unemployment refers to individuals who are unemployed because they are voluntarily between jobs. Certain demographic sectors of the labor market change jobs more often than others. Young people for example, tend to have higher unemployment rates as they search for “better jobs”.
- Structural unemployment refers to the individuals who are displaced because their skills are no longer in demand due to advances in technology or to societal changes. The advent of the automobile, for example, which created jobs for mechanics, displaced and eventually eliminated jobs for horse carriage makers.
- Cyclical unemployment refers to the normal waxing and waning in the unemployment rate that occurs due to the normal fluctuations during a business cycle.

## **The Business Cycle**

An understanding of the business cycle helps an investor to focus on the “big picture”, and is essential in order to set both short and long-term investment strategies and policies.

Business activity can be classified as having seasonal variations, cyclical fluctuations, and long-term secular trends. In addition, the economy and business activity can be affected by random and unexpected occurrences such as a war or “Asian flu”. Over the long run, the economy has continued to expand and grow. However, this long-term growth has been volatile at times and the economy has experienced periodic fluctuations, which are known as the business cycle. There are no firm rules for identifying recessions or for dating business cycles; however, Statistics defines a recession as two consecutive quarters of declining GDP growth. Although each business cycle is itself unique, most business cycles follow a more or less predictable pattern.

Although no business cycle will exactly match the previous cycle, some similarities and general conclusions can be drawn with respect to business and economic cycles and investment strategies in general. These strategies and phases can be tracked by watching certain economic indicators.

- Leading economic indicators tend to anticipate the health of the general economy and include: building permits issued, housing starts, manufacturer’s new orders for durable goods, stock prices, average number of hours worked per week, and commodity prices.
- Coincident economic indicators change at approximately the same time and in the same direction as the overall economy. Examples of coincident economic indicators include: GDP, industrial production, personal income, and retail sales.
- Lagging indicators tend to change after the economy has turned and include: the unemployment rate, labor costs, inventory levels, and the rate of inflation.

## **The Phases of the Business Cycle**

The business cycle consists of four segments, which can be identified by the following signs or signals:

### ***1) Recovery and expansion***

Inflation is stable, or rising only slightly. Typically, these stages last longer than the contraction phase.

Businesses are investing in new capacity to meet increased consumer demand. Corporate profits are rising because profit margins are increasing. Business is confident about the future and is planning production increases. New business start-ups outnumber bankruptcies. Inventories are under control. Retail sales are healthy.

Unemployment is steady or falling. Job creation is strong. Personal incomes are rising. Consumer confidence is high. Demand for credit is high. Consumer spending and housing construction fuels increasing economic activity.

Confidence is high and expectations become excessively optimistic. Investors are told that this time the world is different and that the trees will in fact “grow to the sky”

Typically, in the late stages of the expansion phase the central bank will start to tighten credit in an attempt to cool the economy off by raising short-term interest rates.

Stock and bond markets are booming.

Investment strategy at this point in the business cycle is to stop buying common stocks because the expansion, at some point, must end.

### ***2) Peak***

Optimism and overconfidence override prudence and caution. Stock market and other economic indices are higher than the long-term trends.

Inflation is rising quickly caused by wage increases, labor shortages and product shortages. The pace of economic activity is high and efficiency starts to wane.

Business revenues are down, profits are falling. Production costs are rising faster than prices, which causes profit margins to shrink. Business is no longer making large capital investment. Business output typically exceeds sales. Inventories start to build up due to falling sales. Accounts receivable start to rise, which causes a shortage of working capital and this forces businesses to seek bank financing. Business confidence erodes.



Consumer confidence declines, housing sales fall, and big-ticket consumer spending drops as consumers worry about the future.

Central bank intervention to control inflation, by raising short-term interest rates often causes inverted yield curves at this point in the cycle. Monetary policy bias is towards tightening credit, aimed at causing the economy to slow.

Rising interest rates cause bond prices to fall. Stock prices have weakened and stock market activity drops off. New stock and bond issues are poorly accepted by investors and become rare.

The investment strategy at this point in the cycle is to sell stocks of companies in cyclical industries, stocks with high P/E ratios, and low yielding stocks. Profits earned in the rising stock market should be invested in short term paper such as T-bills or money-market funds, which benefit from rising interest rates.

### **3) *Recession or contraction***

When a recession is apparent and economically the outlook is gloomy. This phase is shorter in duration than the expansion phase normally is.

Corporate profits are falling. Business failures increase. Industrial production falls. Business confidence deteriorates.

Unemployment rises. Consumer confidence falls. Consumers stop spending and become more cautious. New home construction falls. Personal bankruptcies rise. The nightly News and newspapers are pessimistic about the future.

Stock market activities weaken and decline.

The central bank is using lower interest rates and is encouraging credit granting in order to attempt to stimulate economic activity.

The investment strategy at this point in the cycle is to sell short-term bonds and to buy mid and long-term bonds which will benefit from falling interest rates.

#### 4) Trough

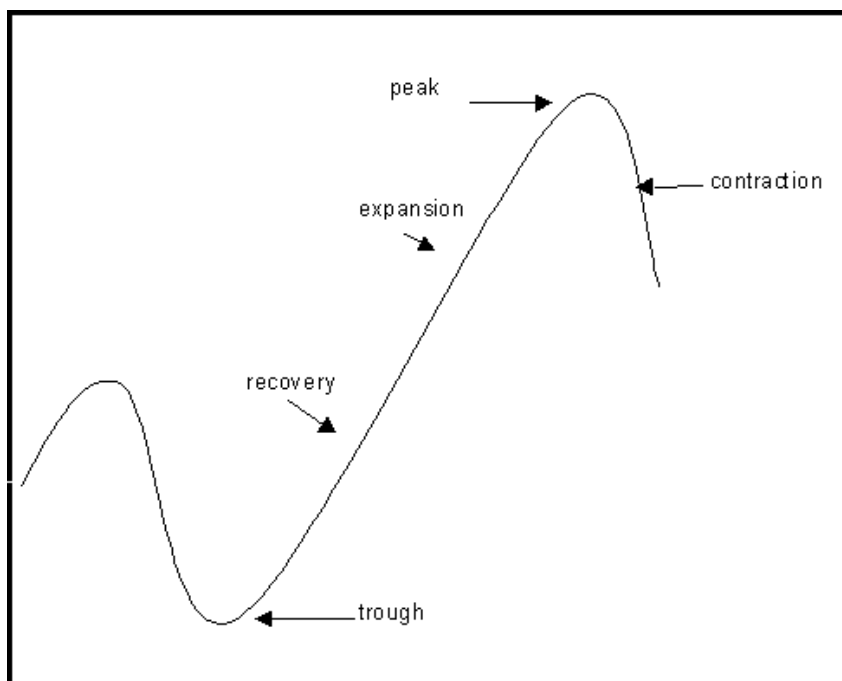
The end of the recession is apparent and gradually conditions that are more favorable start to surface. Stock and bond indices are below the long-term trends. The rate of the deterioration of the economy starts to slow. The leading economic indicators are improving and signs of stability start to return.

Production output is low. Business sales are depressed. Business outlook is pessimistic. There is minimal new capital investment. Inventories have declined. Unemployment is high. Personal income is down which causes reduced consumption. Consumer confidence is low. Doom and gloom are rampant. “The sky is falling”.

However, the inflation rate is falling along with interest rates. Labor is plentiful. Pent-up demand starts to build in the economy. Typically, raw material prices have fallen. Slowly, business and consumer confidence starts to rise. At this point in the cycle, the central bank is attempting to stimulate economic growth by easing credit. Short-term interest rates are reduced in an attempt to restart the economy.

The investment strategy at this point in the cycle is to sell long-term bonds. Profits from long-term bonds should be repositioned by purchasing common stocks of cyclical industries that have fallen out of favor.

### The Phases of the Business Cycle



## **Foreign Exchange Rates**

Global economic conditions affect companies selling products into foreign markets, as witnessed by the “Asian flu” and its damage to the economy in the late 1990s. Additionally, the globalization of business may introduce new competitors and trading partners.

A country's economy is unquestionably highly dependent upon foreign trade. This dependence on trading means that the value of the currency is vitally important to the livelihood and living standards of millions of citizens. The foreign exchange marketplace is global in scope and foreign exchange rates are based on the supply and demand for a particular currency. In the international foreign exchange markets, currencies are traded around the clock and the accepted convention is that all foreign exchange rates are established or measured relative to the U.S. dollar, which is considered to be an international standard.

In the international arena, a country may employ either a fixed or a floating exchange rate system. Under a fixed exchange rate system the currency is pegged against other currencies, usually by imposing currency controls which preclude the citizens from holding foreign currencies; or the central bank will take measures to ensure that the currency stays within a fixed range by purchasing or selling currency in the foreign exchange market. Currently, an example of the fixed exchange rate system is the Hong Kong dollar.

A floating exchange rate means that the central bank will only intervene in the foreign exchange marketplace when it considers the movement of the currency to be excessive. Central banks can either buy or sell in the foreign exchange market, or they can manipulate short-term interest rates. The dollar has been freely floating since the 1950s. When the currency is under downward pressure, a central bank will intervene in the foreign exchange market by purchasing their own currency in an attempt to increase the demand for the currency and thereby attempting to support the value and strengthening of the currency.

When the currency is weak relative to the U.S. dollar, products produced in your country are relatively inexpensive to an American or EU consumer. In other words, a weak currency benefits the respective exporters. At the same time, a weak currency means that products produced in the U.S. or EU are expensive when purchased by the weaker currency, which translates to mean that a weak currency puts importers at a comparative disadvantage relative to their U.S. counterparts.

## Factors Influencing the Foreign Exchange Rate

- Monetary policy. An easy monetary policy increases the money supply and tends to lower the currency's exchange rate. A tight monetary policy reduces the money supply and increases the exchange rate. It is the relative monetary policies between two countries that determines the relationship between the two currencies; therefore, from a foreign exchange perspective Your monetary policy can not be viewed in isolation.
- Relative product prices. If goods are relatively cheap, they will be in high demand. Purchasing power parity states that currency exchange rates adjust to the relative price levels or the expected inflation rates between two countries. Everything else being equal, the country with the lowest inflation rate, will have the strongest currency.
- Relative income levels. The higher the income levels are within a country, the more its people will tend to consume and the more they will desire imported goods. Therefore, the country with the highest real growth rates will tend to have the weakest currency because its people will spend a higher percentage of their disposable incomes to pay for imported goods.
- Taste and quality considerations. A country whose goods are considered to be of high quality, or whose goods are highly desirable, will tend to have the stronger currency.
- Interest rate differentials. The country with the highest real interest rate will attract foreign investment and therefore strengthen the currency.
- Relative profit. A country that offers high rates of return on equity investment, assuming equal risk, will attract foreign capital and thereby strengthen the currency.
- Relative political risk. A country that is viewed as a political safe haven tends to attract foreign capital, which serves to strengthen the currency.
- Currency speculation. Foreign currency speculators can cause changes in the supply and demand of a currency. These changes in supply and demand will translate into either a strengthening or a weakening of the currency.

When examined in isolation the effect of each of the above factors on the exchange rate seems obvious and straightforward. However, in the real world, these factors when considered together often obscure the resulting impact upon a currency.

## **Financial Institutions**

The world of investment has emerged as an important cornerstone in planning and organizing one's financial resources. Regulations and securities law are available in to protect investors and to provide them with a level of confidence in their dealings with the domestic markets. A number of federal and provincial laws regulate the activities and actions of participants in the securities markets.

### **NOTES**

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## **Investments: An Introduction**

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In order to create a portfolio of assets, it is imperative that individuals acquire knowledge of some of the basics of investment theory. These include stock and bond valuation techniques, factors which affect and cause price movements of individual investments, industry life cycles and other criteria in the investment environment which affect investment performance and therefore will impact the final investment decisions.

### **Factors that Affect the Market Price of Stocks and Bonds**

Investor expectations concerning interest rate movements and future inflation often guide investment purchase decisions. Expectations of future inflation rates are built into the interest rates and for example, fixed-rate bonds offer no protection against unanticipated and sustained periods of high inflation. Conversely, a variable-rate bond may offer some inflation protection. Investor expectations of the future earnings and dividend payments of a common stock determine the market value, although the value of assets is also an important factor. A great company in a growth industry however, can still perform poorly if the company disappoints the consensus of analysts' earnings estimates. Large transactions may affect prices temporarily creating bid-ask imbalances. Stock prices can also be affected by rumours, or by public tender offers.

### **Stock Valuation**

Many tools exist that can be used to value equity securities. It is recommended that some form of analysis be performed before purchasing a corporation's stock. Company performance analysis usually includes a review of the historic trends. Although past performance is no indication of future performance, a reasonable assumption is that things will continue as they have in the past.

Fundamental analysis is the evaluation of a company based on its historic financial statements combined with an analysis of the company's future prospects.

Trend analysis would review historic sales, profits and debt levels. Trend analysis would also review valuation ratios such as the price earnings ratio (P/E), price to book value, book value per share, and price to sales.

Other corporate factors that is valuable when analyzing company performance include the product line, product quality, human resource needs, training, and the technological state of machinery or equipment.

The valuation tools used most frequently by investors and analysts include:

1. The dividend discount model (DDM). This is a method for calculating the market price of a blue-chip company's common shares. The value of a common stock is the present value of all future dividend payments.
2. The price to earnings (P/E) ratio is calculated as the price of the common share divided by earnings per common share. A company with higher quality earnings should have a higher P/E ratio than a company with low quality earnings. A growth company will have a higher P/E ratio than a stable company. The P/E ratio for a company should be compared to other companies in the same industry. It is important to note that the P/E ratio is the inverse of market interest rates and when consumer confidence is high, P/E ratios will tend to be high.
3. Growth is not always a blessing. Without careful wealth management, growth can cause cash flow problems. A company's sustainable growth rate is the maximum rate at which it can grow without straining its financial resources. The long-term sustainable growth rate ( $g$ ) is calculated as the product of the return on equity (ROE) and the company's earnings retention rate (RR). If the actual growth rate exceeds the sustainable growth rate, the company must eventually raise additional capital. To raise capital internally, a company can sell equity, increase financial leverage by issuing bonds, reduce dividends, sell marginal operations, outsource production or administration, or increase prices. Externally, a company can seek a merger partner or acquirer.
4. One powerful analytical tool to analyse a company's return on equity (ROE) is the DuPont method of analysis. There are a number of variations of the DuPont analytical technique, which break down the relationship between net income and shareholders equity. One method of ROE analysis uses 3 components that show the relationship of the firm's net profit margin, total asset turnover, and financial leverage. Another, more sophisticated method of ROE analysis uses 5 components that show the interaction of the operating profit margin, total asset turnover, interest expense rate, financial leverage multiplier and tax retention rate. These various components help to analyse the efficiency of a corporation's competitive situation, internal operations, the use of financial leverage, and the impact of the government tax policies.

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## **Bond Valuation**

The price of a bond is based on its coupon, maturity and prevailing market interest rates. Bond price volatility depends upon the cash coupon and the time remaining until the bonds maturity.

The market value of a bond equals the present value of all future cash flows accruing to the investor. Cash flows for the conservative bond investor include periodic interest payments and principal return. Cash flows for the aggressive bond trader may include periodic interest payments and the capital gained or lost when the bond is sold before its maturity.

## **Bond Price Movements**

Any investor contemplating the inclusion of bonds into a portfolio requires an understanding of how and when bond prices change in the marketplace. The coupon rate of the issue, the features of the issue, the credit rating of the issuer and, the term to maturity can affect the bond's market price. The current level of interest rates determines bond prices in the secondary market. When interest rates rise, bond prices fall, on the other hand, when interest rates fall, bond prices rise. A bond's price therefore is said to vary inversely with market interest rates.

A bond with a high coupon rate will trade at a higher price and with less volatility than will a similar bond with a low coupon rate. The greater the portion of the yield that the investor receives through coupon payments (cash income) rather than through the value of the bond at maturity (capital gain), the smaller the risk and therefore, the higher and more stable, a bond's price. In other words, cash flow has value. Cash flow cushions the variability in price movement of the bond. Therefore, high coupon bonds are sometimes known as cushion bonds.

Features of a debt issue include convertibility, call provisions, sinking funds, and purchase funds, any and all of which can affect the market price of the bond. The higher the credit rating of the issuer, the higher the price of the bond, everything else equal. The closer a bond is to the maturity date, the smaller will be the variation from the par value of the bond.

During periods of rising interest rates, the prices of longer-term bonds usually decline more than the prices of shorter term bonds. When interest rates fall, however, prices of longer term bonds tend to rise the most. Longer term bonds are, therefore, more volatile than short term bonds. Lower coupon bonds are more volatile than high coupon bonds. Bond prices, in general, are more volatile when market interest rates are low.



The market price of a fixed income bond depends on its coupon, maturity date and the prevailing market interest rate. Prices decline when interest rates rise and bond prices rise when interest rates decline in order to adjust the price and to reflect a competitive yield. A change in the issuer's credit rating can also cause a fluctuation in price, as higher risk is reflected in the price/yield relationship. Even without a formal rating change, reduced demand can cause lower bond prices and higher yields. For example, this is rapidly reflected in the price of junk bonds when market participants fear that a recession will lead to an increase in defaults. Poor business conditions over a prolonged period can cause financial weakness and jeopardize the firm's ability to pay interest.

Purchasing a bond when interest rates are high is preferable, because the highest yields can be locked in for the long-term. Holding bonds is most attractive when rates are declining, due to the upward movement in the market prices of fixed income securities. High inflation erodes the dollar value of fixed interest payments. Falling interest rate periods are boom times for bondholders. Bond prices are quoted in daily newspapers and are easily available over the Internet.

## Industry Life Cycles

The profitability of an industry tends to be a function of the competitive structure within the industry. The competitive structure, the amount, and the intensity of the competition within the industry are important because these factors determine the prices, costs, advertising, and the overall investment that a firm is required to make in order to compete successfully. The competitive environment in which a company operates can have a dramatic impact on its stock price. A company's long-term survival depends upon its ability to exploit its long-term sustainable competitive advantage. There are three generic competitive strategies that are used by a corporation's management in order to accomplish the firm's strategic objectives —cost leadership, differentiation, and focus.

- Cost leadership means that a firm sets out to become the low-cost producer in its industry.
- A firm implementing a differentiation strategy seeks to be unique, and the reward for that uniqueness is a premium price.
- The focus strategy has two variations. A **cost focus** seeks a cost advantage in the target segment, while a **differentiation focus** pursues differences within a target niche.

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Industry analysis is the study of industry groupings including an examination of the competitive position of a particular industry in relation to other industries. The intent is to identify companies that show particular promise within an industry. These analyses are affected by demographic and social changes. An integral part of any industry analysis will be to determine the industry's stage in its growth cycle. Additionally, it is important to bear in mind that governments can impact an industry and its future prospects through regulations, deregulation, taxes and subsidies.

Like people, industries and companies tend to go through predictable stages. Understanding where an industry is located in its life-cycle will enable the investor to make better investment decisions, since different types of valuation methods are used for companies in different stages of maturity. Additionally, the stage of the life cycle has a tremendous impact upon business risk.

## **Stages or Phases of the Industry Life Cycle**

### ***1. The developmental or formative stage***

- This stage is often driven by entrepreneurial and innovative focus.
- The industry sales and earnings are usually small or possibly negative.
- Growth prospects are high.
- Competition tends to increase during the progression of this phase as other entrepreneurs recognize the market potential.
- High risks exist in this stage since there is uncertainty as to whether or not consumers will widely accept the product, and which firms will survive.
- Venture capitalists are often active during this stage.

### ***2. The expansion or growth stage***

- This stage is characterized by rapid growth of both unit sales and profits.
- Market leaders tend to emerge due to consolidation and shakeout of weak competitors.
- Consumer acceptance broadens the market as the leaders improve the product.
- Risk in this stage declines due to increased consumer acceptance and customer loyalty starts to build.
- Companies tend to start to go public with initial public offerings (IPO).
- Companies tend to reinvest earnings therefore, little or no dividends are paid to investors, but return on equity (ROE) tends to be high.

### ***3. The maturity stage***

- This is usually the longest stage in the life cycle and can last for many decades.
- Typically, in this stage, approximately 80% of the market has been saturated.

- The growth rate slows and stabilizes at a level that is sustainable over a long period of time, due to competition and shrinking profit margins.
- Firms tend to expand into additional market niches by developing add-ons for the original product, which helps to sustain a higher growth rate.
- As growth slows, the need to expand production facilities declines, which reduces the need for capital expenditures, improving the firm's overall financial flexibility.
- Excess cash that previously has been reinvested into expansion is now available to reduce corporate debt or to be paid as dividends to investors.

#### **4. The declining or harvesting stage**

- The real growth rate tends to decline to a level that is less than that of the overall economy.
- Substitute products and technologies tend to make the industry's product obsolete.
- Firms tend to focus on keeping costs down, in order to maintain, or slow the decline in profit margins and profits.
- Firms may actually sell production assets that are no longer required.
- Dividends paid to investors tend to be large.
- The firms in this stage are often referred to as cash cows.
- However, it is possible for firms and industries to perpetuate themselves by becoming more dynamic and by adding new products or new product lines.

### **Demographic and Social Changes**

Demographic and social changes may have a dramatic influence on the outlook for an industry, or company. This, in turn, will affect investor expectations and therefore the market price of the firm's securities.

- Age distribution. The baby boom generation, which was born between 1946 in 1963, has already and will continue to have a dramatic impact on the relative fortunes of industries and firms. As baby boomers continue to grow older, they will increase the demand for health-care services, pharmaceuticals, retirement communities, and other leisure activities such as RV's, travel, and cruises.
- Income distribution. As baby boomers reach the ages of 45--54 which is typically when family incomes are at their highest, demand for luxury goods should also rise. Diversity in income distribution should lead to more niche markets. Companies that do not target but instead employ a shotgun approach to marketing may find the demand for their products shrinking.
- Distribution of the industrial mix. The shift away from the traditional resource industries and towards service and technology, which require a highly skilled workforce, can affect the future prospects of firms.

## **International Considerations**

The changes in flows of exported goods and services have a dramatic impact on the domestic economy because capital flows influence both interest rates and exchange rates. An investor must be cognizant of the political and economic prospects for our major trading partners and recognize the effects these factors will have on companies.

## **Interest Rates**

Monetary and fiscal policy can affect domestic interest rates.

An inversion of the yield curve occurs when short-term interest rates are higher than long-term interest rates. This often signals a decline in the near future for the stock markets, as investors seeking the safety of high yielding, short-term treasury bills, abandon equities.

A decline in long-term interest rates usually results in higher stock prices since there is greater demand for stocks and less demand for long-term bonds.

## **Introduction to Portfolio Management**

In order to formulate a portfolio management strategy, it is important to understand some basic information such as what an investment is.

An investment is defined as any asset into which funds can be placed with the expectation that the invested capital will generate additional positive income; and many investors, will insist that, as a minimum requirement, the investment will preserve its value.

Many types of investments are available; ranging from those which will protect and retain capital, to the more aggressive derivative securities. Investors select investments to meet personal income goals and requirements, including interest income, capital growth, dividend income, and rental income.

Today, investors search beyond local markets for higher returns and foreign market diversification opportunities. Diversification plays an important role in lowering risk through the development of a portfolio that includes a number of different asset classes.

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**There are four steps in investment portfolio management:**

- 1) Identify investment objectives, preferences, and constraints and determine the resulting investment policy that is then documented.
- 2) Determine and apply an investment strategy through the choice of specific financial and real assets, using the guidance of the investment policy statement.
- 3) Monitor changes in market conditions and the circumstances of the specific investor.
- 4) Adjust the portfolio to take into account any changes that occur.

**Portfolio Management and Asset Allocation**

Asset allocation is an important part of portfolio management. Asset allocation is the decision making process relating to the determination of:

- which asset classes are to be considered for inclusion in the investment portfolio,
- the proportion of funds which are to be allocated to each asset class, and
- the determination of how much money is to be invested into each security within individual asset classes.

There three steps in the asset allocation process undertaken by asset managers:

***1) Determine the financial and investment objectives***

Investment strategy will differ according to the various personal objectives of investors. When the investor is seeking to maximize the total return on a portfolio, research has shown that it is more important to choose the right asset mix rather than the right investment within the asset class.

***2) Identify the investment constraints that are specific to the individual investor***

Factors to be considered here are personal data such as:

- age,
- family obligations,
- income tax considerations,
- net worth,
- current income,
- investment personality, knowledge, temperament, risk tolerance, unacceptable risks,
- time horizon, and
- any other relevant investment constraints.

### **3) Determine the allocation strategy**

This step involves choosing a risk and reward combination which provides the highest levels of investor utility or satisfaction with which to achieve the financial objectives, while considering an investor's specific constraints and personal circumstances.

However, before developing an investment strategy it is necessary to determine whether or not the goals and objectives are realistic. It is important to comprehend all of the risks that are specific to each of the various components of the portfolio. This is critical in order to understand the relationship that exists between risk and the investment time horizon. It is also necessary to consider the benefits of a diversified portfolio.

### **Diversification**

Diversification is a critical aspect of portfolio management, which can be achieved through asset allocation. An asset allocation program can:

- Diversify by asset class, which is usually expressed as a range of recommended percentages with a specified minimum and maximum limit.
- Diversify within asset classes.
- Diversify geographically.
- Review and re-balance the portfolio.

Diversification is a risk management technique that attempts to provide some insurance against the unexpected. The rule of thumb for diversification is to combine investments that have low or negative correlations, in order to eliminate specific and unique investment risk in a portfolio, until only market risk remains. When only market risk remains in a portfolio, options and futures derivative contracts can be used to hedge these risks.

Diversification also has an effect upon portfolio return; it reduces risk but it can also reduce a portfolio's maximum return. Diversification lessens the pressure to sell a particular holding and therefore, increases trading flexibility by extending the investor's time horizon.

Using a strategic approach to portfolio management, there are potentially three levels of diversification within an asset allocation model, and an investor should determine the answers to the following questions:

- 1) How should the portfolio be apportioned between asset classes? Diversify between asset classes such as cash, fixed income, real estate, and equities.
- 2) How should the portfolio be divided within each asset class? Diversify within each asset class by dividing the capital between conservative, moderate, or aggressive investments.
- 3) What percentage of the portfolio should be invested outside of ? Diversify geographically to acquire the benefits of international diversity.

## **Risk and Return in Modern Portfolio Theory**

For many investors, risk is generally considered to be related to bad news. What many individuals fail to realize is that all investment entails risk, and that any investor who wishes to obtain a return that is higher than the risk free rate must assume investment risk.

Modern portfolio theory assumes that investors are rational beings who are risk averse and that given equal returns, will prefer an investment that has the lower risk. If two investments have equal risk, a rational investor will prefer the investment with a higher return. Investors are not as averse to risk as they are averse to losses.

A forecast of a security's return is an expected or anticipated value which is representative of the investor's expectations of the return distribution for the security, and the expected return includes both the expected realized and unrealized annual income. Historic returns are not good predictors of future returns.

The expected return of a portfolio is the weighted average of the expected returns of the securities that comprise it. However, the risk of a portfolio is a function of three factors:

- the relative weights of each of the assets which comprise the portfolio,
- the volatility of each of the portfolio's components as measured by the standard deviation of returns, and
- the correlation of the returns between each pair of assets which comprise the portfolio.

Analysts and academics use several tools to facilitate the evaluation of portfolios, one being the normality assumption. The normality assumption indicates that the returns on a security are clustered around a single number. Statisticians call this the central tendency towards the mean or average. This normality assumption allows an investor or portfolio manager to make selections of securities based on only two criteria: the expected return of the security, and the standard deviation of the security's return.

Standard deviation is a measure of the expected deviation or variability of returns in relation to the expected return. Standard deviation is a statistical measure of the spread of the security's returns. As a general rule, the higher the standard deviation, the higher the total risk of a security or a portfolio.

The standard deviation of a portfolio is always less than or equal to the weighted average of the standard deviations of the component securities.

The standard deviation of a portfolio can be calculated from the standard deviations of the individual securities that make up the portfolio. Even if the return distributions of the individual securities within a portfolio are not normally distributed, as the total number of securities held in the portfolio increases, the distribution of the portfolio's return tends towards normality.

The standard deviation associated with the return on an asset decreases with the square root of time. Therefore, the longer the analysis horizon is, the lower the standard deviation of the annualized returns over the horizon will be. Extending the time horizon decreases the risk of a stock investment in relation to a riskless asset. A minor forecasting mistake can have an important impact on the final portfolio value if the analysis horizon is long. For example, assume that investment has an expected annual return of 10% with a standard deviation of  $\pm 20\%$ . This means that the return on the investment can vary from -10% to 30% in any given year. However, if the investment is held for 10 years, the standard deviation drops to  $\pm 6.32\%$ ; after 25 years, the standard deviation is  $\pm 4.0\%$ ; and after 45 years, the standard deviation drops to  $\pm 3.98\%$ .



## The Relationship between Investment Horizon and Risk

$$\sigma_{\bar{R}_n} = \frac{\sigma_{R1}}{\sqrt{n}}$$

Where:

$\sigma_{\bar{R}_n}$  = standard deviation of average return over n years

$\sigma_{R1}$  = standard deviation of rate of return in 1 year

n = time in years

Another important measure used in portfolio analysis is correlation. Correlation describes how well two assets move relative to one another. The correlation coefficient describes the pattern of two asset's returns relative to one another. A correlation coefficient can range between -1.0 and + 1.0. Assets are said to be perfectly positively correlated if the correlation coefficient equals 1.0 and the assets are said to be perfectly negatively correlated, if the correlation coefficient is -1.0. A correlation coefficient of 0.0 indicates that the returns of two assets are uncorrelated. In portfolio management, the intent is to locate and combine assets with low or negative correlations. For diversification purposes, a perfectly negative correlation is most attractive, since this indicates that the securities vary in opposite directions and fluctuations will tend to cancel one other. Correlation of -1.0 (perfect negative correlation) allows the risk of the portfolio as measured by the standard deviation to equal zero. In the real investment world, there are no assets with perfectly negative correlation. However, one of the major reasons cited for the inclusion of foreign equities in a balanced portfolio, is the negative correlation between North American and other stock markets. Furthermore, research also indicates that there is a negative correlation between equity markets and commercial real estate.

## Methods for Understanding and Measuring Risk Tolerance

There is no unique, riskless asset, since all investments carry a risk of some type. However, by convention or proxy, federal government securities are considered risk free. For many years T-bills were considered the appropriate risk free investment against which to measure investment performance. However, the more sophisticated analysis that is supported by modern portfolio theory suggests that better investment decisions can be reached when one assumes that there is one riskless asset for each selected investment horizon. For example, an investor with a 20 year time horizon would use a twenty year government of bond as the appropriate risk free asset against which to measure portfolio returns.

The following concepts and techniques assist in gaining a better understanding of an individual's perceptions of investment risk as a whole, which can be used when determining the individual components that will eventually comprise a portfolio.

### **1. Demographics**

- Men will usually accept higher risks than women will.
- Risk tolerance decreases with age.
- Risk tolerance increases with wealth, income, and education.

### **2. Life-cycle approach**

- The accumulation phase is represented by a young person just starting out in a career. Priorities are usually to build up some savings, obtain life insurance, buy a home, and start a family. With a long investment time horizon, large risks can, theoretically, be taken.
- In the middle years, an individual is in a position to start a serious savings program. Discretionary income is generally high and typically, a primary goal is retirement saving. The time horizon is generally still long, although income tax considerations are probably more important than in the accumulation phase. There is usually little need for current income, and the appropriate investment policy is generally one of real growth.
- At the time of retirement, there is usually a need for stable income and risk tolerance diminishes. Inflation protection may be desirable, and typically, the need for investment marketability is higher than in the other life-cycle stages.

### **3. Investment personality or psychographics**

- Passive investors are inclined to be people who have acquired wealth passively for example by inheritance. Generally, these individuals have low-risk tolerance. Passive investors tend to be risk adverse trend followers, who prefer a well-diversified portfolio. Academic research shows that a large percentage of low and middle income families tend to produce passive investors.
- Active investors on the other hand, tend to have a higher risk tolerance. These individuals typically, want to take control of their financial destiny. Active investors tend to be individuals who have earned their own wealth for example, entrepreneurs. Active investors typically follow a focused rather than a diversified investment policy. As well, active investors often have been raised in middle to upper income families.

## **Portfolio Rebalancing**

In managing a portfolio of investments, an investor will undertake changes in the portfolio from time to time due to a:

- Change in the specific circumstances of an individual investor.

- Change in the expected return of an asset.
- Change in the risk of an asset.
- Change in the correlation between two assets.
- Change in the risk free rate of return.
- Change in general economic conditions.

## **Asset Mix Techniques and Rebalancing**

The rebalancing of a portfolio involves both time, and transaction costs. Therefore, portfolios should be reviewed regularly for changes in material events in the individual investor's personal circumstances; and the relative appeal of the various portfolio components as market conditions evolve. Typically, asset mix decisions are made for one year at a time.

Two of the most commonly referred to asset allocation techniques are strategic and tactical asset allocation.

- Strategic asset allocation is based on data covering the clients investment horizon and dictates which asset groups should be emphasized or underweighted in the portfolio. The higher that an individual's aversion to risk is, the smaller the allowed deviations from the strategic allocation should be.
- Tactical asset allocation involves temporarily departing from the strategic weighting's in order to benefit from temporary imbalances in the securities markets.

## **Portfolio Performance Appraisal**

The success of the portfolio manager is measured by comparing the total return of the portfolio to comparable benchmark portfolios. The most common calculation is based upon total return divided by the average amount invested.

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## Managing Investments & Creating Portfolios

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The key to early retirement or to retiring comfortably can be found by answering 3 essential questions:

- 1) How much capital has been saved?
- 2) How much investment income will the savings or capital generate?
- 3) How much income does the retiree require in order to live comfortably?

### Savings

Why should an individual save? There are a number of reasons why individuals should save on their own, without relying exclusively on government or employer-sponsored pension plans.

- To increase future consumption.
- To maintain current consumption if earnings fall.
- To stabilize consumption over a lifetime.
- To preserve a reasonable lifestyle.
- To build an estate for heirs.

Savings consist of spreading consumption over time; and they result from the postponement of current consumption in order to be able to fund future consumption. Consumption at some point in the future is determined by future savings, current savings already accumulated, and the investment return on the current savings (including the effects of income tax). Savings increase future purchasing power only if the real return on savings is positive, i.e. greater than the rate of inflation. Current savings, which are also called asset reserves, would include forced savings such as the Pension Plan (CPP) and employer sponsored registered pension plans (RPPs). These types of forced savings plans affect the level of voluntary savings, but they will eventually contribute to future consumption.

## **The Steps to Building an Investment Portfolio**

The purpose of an investment policy is to outline or provide a basis for an asset allocation mix that is suitable to the investor's goals, constraints, and risk tolerance. An investment policy establishes objectives along with the approach that is to be used to obtain them. The benefit of a written investment policy statement is to maximize the investor's well being and net worth while considering the financial objectives and any specific constraints that are imposed by the investor.

An investment policy must be formulated and based upon the specific circumstances and characteristics of each investor. These situation specific characteristics include:

- age,
- investment risk tolerance,
- capital currently available to invest,
- current income,
- the future need for investment capital and income, and
- the amount that is required to be saved on an ongoing basis.

The investment policy must take into account inflation, economic growth, and the investor's investment time horizon.

Additionally, an investment policy must consider the investor's consumption or desired consumption profile, which is influenced by five factors:

- Initial savings or wealth.
- Periodic income.
- Periodic savings.
- Real return generated on the portfolio.
- Consumption preferences i.e. the importance to the individual of trading off current consumption for the ability to consume in the future.

## **Establishing Investment Objectives**

Typical investment objectives that must be considered and formulated into an investor's investment policy and asset allocation decisions include:

- Preservation of capital.
- Requirement for current investment income.
- Capital growth.
- Minimization of income taxes.
- Liquidity of the investment.

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## Investment Policy And Performance

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### **Creating and Implementing Your Investment Policy**

Wealth Management Professionals establish an investment policy that supports your fiduciary requirements while providing adequate risk controls. Your customized portfolio strategy may tap our Fundamental Investment Offerings, which are designed and managed to rationalize costs and reduce taxes. In addition to these core offerings, the Wealth Manager can partner with premier outside fund managers or investment advisors to provide clients with hedge fund, real estate, and private equity opportunities. Through our Multi-Manager Investment Program, wealth managers are also equipped to design a portfolio with third-party investment managers as needed. Customized reporting capabilities enable a wealth manager to present the client with a comprehensive account statement that simplifies the tracking and analysis of the client's holdings.

To achieve appropriate diversification, a wealth manager encourages clients to be invested in the stocks of large-, mid-, and small-capitalization companies in the mother country and abroad. Wealth managers employ fixed-income securities as part of the strategic asset allocation and to provide clients with income, where appropriate.

Wealth Manager proprietary investment offerings should include the following:

#### ***Equity Investment Funds***

- Large-Cap Growth
- Equity Income
- Multi-Cap Global Value
- Mid-Cap Growth
- International

#### ***Fixed-Income Funds***

- Taxable Fixed Income
- Tax-Exempt Fixed Income

***The wealth manager's alternative investment offerings could include:***

- Real Estate Fund
- Stable Return Fund
- Private Equity Funds

## Ratios Used To Analyze Financial Statements

### Profitability

#### *Return on Equity*

$$\frac{\text{Net Income}}{\text{Closing Common Equity}}$$

This ratio is used to determine the adequacy of the return on common shareholder's investment. Generally, the higher the ROE the better.

#### *Return on Assets*

$$\frac{\text{Net Income}}{\text{Total Assets}}$$

This ratio measures the effectiveness to which management is employing the firm's resources. The ROA measures the return that the company earned on its assets; it does not measure the return earned by an investor. Low ROA might indicate poor management ability. Low ROA may also indicate that further analysis of the firm's assets might reveal inefficient assets which can be disposed of and converted to cash.

### Operations

#### *Gross Profit Margin*

$$\frac{\text{Gross Profit}}{\text{Net Sales}}$$

This ratio indicates the % of gross profit that is earned on each dollar of sales. The gross profit margin for a firm should be compared to the industry averages.

#### *Net Profit Margin*

$$\frac{\text{Net Profit}}{\text{Net Sales}}$$

This ratio indicates the % of net profit that is earned on each dollar of sales. The higher the net profit margin the better the ratio is considered to be. Low profit margins can be an indication of a highly competitive industry structure. Low profit margins indicate that the firm should increase its sales, decrease its costs, or both. Profit margin ratios should be based on the net income from continuing operations in order to accurately reflect the firm's probable profitability into the foreseeable future.

## **Resources**

### ***Asset Turnover***

$$\frac{\text{Net Sales}}{\text{Total Assets}}$$

This ratio measures the effectiveness of the firm's use of assets to generate sales revenue. This ratio can vary over time for a given firm. Firms in the start-up stage tend to have low asset turnover ratios, while mature companies tend to have a more stable asset turnover. Generally, a high asset turnover ratio indicates that the assets are being effectively employed; however, a high asset turnover does not explicitly take into account that the firm might be using old assets, which have been fully depreciated. A firm using newly purchased assets will show a lower turnover ratio because of the higher depreciation costs even though the new machinery is highly efficient. Firms will try to keep their long-term asset turnover ratios close to the industry norm.

### ***Inventory Turnover***

$$\frac{\text{Cost of Goods Sold}}{\text{Closing Inventory}}$$

The inventory turnover ratio indicates the number of times that an inventory is sold and replaced over a given time period. This ratio can be used to assess the quality of an inventory. Inventory turnover ratios vary widely by industry and obvious deviations from the industry standard may indicate problems. Too much inventory can indicate improper purchasing, inadequate marketing, or an undesirable product. On the other hand, too little inventory can cause problems with product availability and can therefore hurt sales.

### ***Receivable Turnover***

$$\frac{\text{Credit Sales}}{\text{Closing Accounts Receivable}}$$

The receivable turnover ratio measures the effectiveness of a firm's credit and collection policies. A high receivable turnover rate can indicate an effective credit and collection policy or alternatively it can indicate that a business operates on a cash basis. A low turnover rate indicates that the firm should pay more attention to collecting its accounts receivable. Accounts Receivable can amount to interest free loans to customers. The firm should analyze its accounts receivable in terms of its stated credit policy.



## **Debt**

### ***Total Debt to Equity***

$$\frac{\text{Total Debt}}{\text{Book Value of Common Equity}}$$

This debt ratio measures a firm's leverage, and is therefore an estimate of its financial risk. A high-level of debt can be a warning sign of possible problems in the future and indicates high financial risk. A high-level of debt implies high fixed interest costs, which reduces the firm's financial flexibility and its ability to pay dividends to the common shareholders. A low level of debt can indicate that management is not optimizing the firm's capital structure and is therefore not maximizing total shareholder wealth.

### ***Total Debt to Assets***

$$\frac{\text{Total Debt}}{\text{Total Assets}}$$

This ratio measures the level of support that is provided to the firm by its creditors. The reciprocal of this ratio is called the asset coverage ratio. The asset coverage ratio shows the amount of assets backing the companies debt and is a safety measure from a bondholder's perspective. This ratio should be calculated using total tangible assets in order to determine a conservative estimate of the firms ability to re-pay a bondholder.

### ***Times Interest Earned***

$$\frac{\text{Income from Operations}}{\text{Annual Interest Expense}}$$

The times interest earned, or the interest coverage ratio, measures the margin safety for a corporation's bondholders. This ratio measures the firm's ability to pay its annual fixed interest charges from its ongoing business operations. There are no set rules determining an acceptable number of times earnings should cover interest. A bondholder should investigate the long-term trend of this ratio since it is a better indication of the firms continuing ability through good times and bad times to meet its interest obligations. As a rule of thumb, the more volatile a company's earnings, the higher the times interest earned ratio should be.

## **Liquidity**

### ***Current***

$$\frac{\text{Current Assets}}{\text{Current Liabilities}}$$

The current ratio measures the business's ability to meet its current obligations (due within the next 12 months) with its current assets. This ratio should be similar to the industry average. For many businesses, an acceptable level of coverage is on the order of 2:1. If the ratio is too low it can indicate possible solvency problems. Excessive investment in current assets, on the other hand, can indicate an ineffective use of the firm's short-term resources. A high current ratio can indicate uncollected accounts receivable, too much inventory, or it can indicate that management is stockpiling cash.

### ***Acid-Test (Quick)***

$$\frac{\text{Cash + Cash Equivalents + Accounts Receivable}}{\text{Current Liabilities}}$$

The acid test or quick ratio is used to determine the business's ability to pay its current liabilities using only the most highly liquid of its current assets. This ratio is a more stringent measure of a firm's liquidity since it ignores the value of the firm's inventory. A ratio of 1:1 is considered desirable, but no single standard exists.

### ***Working Capital***

$$\text{Current Assets} - \text{Current Liabilities}$$

The working capital or net current assets are used to finance the business's cash conversion cycle i.e., the time required to convert raw materials into finished goods, to sell the finished goods, and to collect the accounts receivable. The amount of working capital required by a firm varies by industry, season, and stage of the business cycle.

## Value

### ***Dividend Payout***

$$\frac{\text{Total Dividends (Common + Preferred)}}{\text{Net Income}}$$

The payout ratio indicates the % of net earnings that the corporation pays out in the form of dividends to the equity owners. Growth company's usually have low or zero payout ratios. The Board of Directors of a corporation tends to prefer to maintain a steady payout ratio rather than allowing the payout ratio to fluctuate with corporations earnings. The Board of Directors of a blue-chip company does not increase dividends without considering the informational content of the dividend. Generally, when a blue-chip company increases its dividend, this signals that the Board believes that the future prospects for the business are expected to be good. The retention ratio (RR) is the % of earnings that are retained in order to finance the future operations of the business. The RR is calculated as (1-payout ratio)

### ***P/E Multiple***

$$\frac{\text{Current Market price of Common Share}}{\text{Earnings per Common Share (latest 12 Months)}}$$

The P/E multiple or P/E ratio is calculated only for common shares. This ratio calculates the trailing P/E ratio, since it is based on the previous 12 months earnings. The P/E multiple should be used to evaluate companies which are in the same industry, in order for the results of a comparison to be meaningful. The P/E multiple varies widely from industry to industry. In simplistic terms, the P/E multiple indicates the price that investors are willing to pay today for each dollar of a corporation's earnings. The P/E multiple is one of the most widely used financial indicators or tools employed by investors.

### ***Book Value per Common***

$$\frac{\text{Total Shareholders Equity} - \text{Preferred Equity}}{\text{average number of common shares outstanding}}$$

The book value per common share is an indication of the margin of safety for common shareholders. This ratio indicates the dollar amount that would be available to be distributed to a common shareholder in the case of dissolution of the company. A more conservative estimate of the margin of safety would calculate the tangible net worth/per common share. Academic research has shown that the ratio which calculates price/book value is a good predictor of future investment results, and that stocks selling at low price/book value tend to outperform stocks selling at high price/book value multiples.

## ***Earnings per Common Share***

$$\frac{\text{Net Income (before extraordinary items) - Preferred Dividends}}{\text{average number of common shares outstanding}}$$

Earnings per common share or EPS is one of the most common financial ratios employed by investors and is frequently reported in the financial press. High net earnings per common share can indicate that management has the ability to pay dividends to the common shareholders. Conversely, low or negative EPS generally indicates that no dividends should be expected.

## ***Market Capitalization***

$$\text{Current market Price of Common Share} \times \text{current number of common shares outstanding}$$

The market capitalization or market cap calculation computes the current fair market value (FMV) of the corporations common shares outstanding. Studies have shown that small cap stocks tend to outperform large cap stocks.

## **The Purpose of Financial Analysis is Threefold:**

- to determine the growth potential of the firm,
- to determine the level of risk within the firm, and
- to determine the financial flexibility of the firm

## **The Limitations of Ratio Analysis**

- Large multinational conglomerates with many different business segments can be difficult to analyze. The difficulty is compounded by the investor's inability to identify comparable competitors against which to measure the conglomerate.
- Qualitative factors such as: economic and political considerations, management ability, marketing ability, and the human resources of the firm are not measured in the traditional financial statements.
- Corporate management can manipulate the financial statements by making accounting choices which are available to them and still remain within the acceptable standards required by the generally accepted accounting principles (GAAP) in order to put the best face on information contained within the financial statements.
- There is always a time delay between the end of an accounting reporting period and the actual publication of the firm's quarterly or annual financial statements. The delay can be several months.

- Management choices regarding the reporting of financial activities will vary from company to company, making comparisons difficult for an investor. For example, 2 identical corporations in the same industry may choose different depreciation rates for their equipment, or they may choose different accounting techniques for reporting inventory.
- Ratios do not necessarily disclose the quality of their components. For example, a high current ratio might mean that a company has high accounts receivable or inventories and not cash.
- Financial statements are based on historic costs and therefore may be misleading during periods of inflation.

### **Interpreting Financial Ratios**

- The long-term trend of the ratios can be as important as the absolute value of the ratio itself.
- General economic conditions affect the ratios; therefore, the investor should study the ratios with respect to the stage of the business cycle.
- Ratios should be compared to industry standards or norms.
- Ratios should be compared to management's stated goals for the firm.

Experience helps an investor to evaluate the meaning of the information contained within the financial statements.

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# The Basic Tools Of Estate Planning

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## 1) The Will

Financial advisors recommend that the details of a Will be discussed with family members, in advance, to prevent or to reduce future arguments and discontent. Without a Will, the identification of heirs cannot take place and provincial law determines how to divide the estate. When an individual dies without a Will, they are said to have died intestate. This may result in an apportionment that is not the individual's preference and in distributions that make poor tax and business sense.

A Will is used to:

- appoint an executor and/or possible alternative executor(s) for the estate
- nominate guardian's for minor children or other dependents
- instruct on the distribution of personal effects
- make specific bequests
- give the executor the power to administer the estate
- establish testamentary trusts, and
- guide the executor on funeral arrangements.

The executor's duties generally are to:

- locate the last Will and interpret it
- arrange the funeral
- prepare an inventory of assets and liabilities
- apply for and obtain the letters of probate, in all provinces except Quebec
- guide the estate through the probate process
- safeguard the assets of the estate
- settle all claims, debts, and expenses of the estate
- prepare and file tax returns
- obtain a clearance certificate from Revenue
- keep account of assets, revenues, and expenses
- distribute assets to the beneficiaries, and
- ensure that the deceased's wishes are being met through the entire estate settlement process.

In short, the executor must ensure that all terms of the Will are met and that the estate is properly settled.

Basic clauses typically found in a Will include:

- Identification and revocation. In this clause the testator identifies himself and revokes all previously drawn wills.
- Executor appointment. This clause identifies the executor or co-executor and may waive the requirement for the appointed executor to post a bond. It is in this clause that the compensation for the executor is outlined.
- Payments of debt. This clause lists the sources that are to be used for the retirement of outstanding debt as well as the funeral expense and any administration costs to the estate.
- Payment of taxes. This clause provides for the payment of income taxes and the sources that are to be used for the payment of these income taxes.
- Specific bequests. This clause is used to distribute specific property to named beneficiaries.
- Residue of the estate. This clause provides for the disposition of the balance of the estate after specific bequests have been distributed.
- Trusts. This clause provides for the establishment of testamentary trusts.
- Powers clause. This clause grants powers to the executor so that the executor can manage the estate. Specific powers may include the ability of the executor to borrow money on behalf of the estate, invest or reinvest assets, sell property on behalf of the estate without having to apply to the probate court for the required permission. A mutual fund clause allows the executor to delegate the investment responsibility to a professional money manager; this power is required since the executor and trustees of the estate cannot delegate their responsibilities.
- Appoint guardian's. This clause names the guardians who will care for the testator's minor or dependent children.
- Attestation. This clause appears at the end of the Will and acknowledges that the testator knew that he was drawing up a Will with which to distribute his estate.
- Signatures. The Will is signed by the testator as well as the independent witnesses to the signature.

## **2) Insurance**

Insurance is important in an estate plan for two major reasons. It provides liquid funds when they are needed at the time of death. Secondly, insurance policy death benefits are not taxable. However, there are different tax consequences that flow from the manner in which policies are held, who pays the premiums, and the type of policy.

### **3) Gifting**

Certain types of gifts may be made without tax consequences or in circumstances under which tax may be deferred indefinitely. Other gifts may result in immediate tax consequences under which the Income Tax Act's income attribution rules or the deemed capital gains rules apply. It is recommended that a professional advisor be contacted before a gift is bestowed to ensure that the funds flow without triggering unforeseen income taxes.

### **4) Power of Attorney (POA)**

A power of attorney is essential for any individual who is concerned about losing control of their affairs and who wishes to minimize the expense and inconvenience of the courts supervision.

This document is important when an individual wishes to see a financial, retirement, or estate plan carried out due to reasons including illnesses, poor mobility, or vacations. POAs can even be used in the unfortunate event of incapacity.

There are two basic types of POAs; one provides authority for financial decisions and the other authorizes parties to make decisions about another's personal care.

### **5) Trusts**

Essentially, trusts assign future control of financial assets. A trust, which is established while an individual is alive, is called an inter-vivos trust. A trust, which is established in a Will, is known as a testamentary trust.

There are three parties to a trust:

- the settlor is the party that establishes the trust,
- the trustee is the party that takes title to and administers the trust property, and
- the beneficiary who may receive capital and or income from the trust.

The establishment and monitoring of formal trusts can be a complicated and time consuming activity and it is therefore recommended that appropriate professionals such as lawyers and accountants be consulted as part of this process. This will ensure that an individual's legal and tax circumstances are adequately considered and appropriately dealt with.



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# Basic Estate Planning Techniques

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## **1) Designate Beneficiaries**

Assets designated to specific beneficiaries (named individuals rather than the estate) on life insurance policies, registered retirement savings plans (RRSPs), registered retirement income funds (RRIFs), annuities, and registered pension plans (RPPs) are paid or transferred directly to the beneficiary from the plan, thereby bypassing probate.

## **2) Income and Capital Shifting**

Income splitting is an established technique designed to shift funds that would otherwise be taxable, to another party for three basic reasons:

- lowering of current income tax,
- maximizing deductions and credits, or
- independent funding and the ability to prove the source of funds for income tax reporting purposes.

The income attribution rules prevent the shifting of income to certain individuals who are in a lower tax bracket. In addition, the income attribution rules usually operate where there is a transfer of property for the benefit of a spouse or a non-arms length minor, and occasionally where the transaction is with another non-arms length adult. Generally speaking, the income attribution rules attribute income taxes back to the transferor, or the donor, and the result is to disallow income splitting. However, specific exceptions should be reviewed with the individual's tax advisor before each income transfer to ensure that it is handled in the most appropriate fashion.

Capital splitting is a technique, such as an estate freeze, to build up an estate for beneficiaries. It is a long-term arrangement under which substantial assets will be built up in the name of the beneficiaries. The major benefit of capital splitting arises on death since the assets owned by the beneficiaries of the split will not have any deemed realization for income tax purposes, when the individual dies.

## **3) Tax Deferral**

The basic reason that tax deferral is an attractive option in estate planning can be summed up by saying that a dollar of tax paid this year is more expensive than a dollar of tax paid in the future. In other words, the time value of money must be considered. An example of a tax-deferral mechanism is a spousal rollover at the time of death.

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## Insurance And Risk Management

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Building net worth over a lifetime requires prudent planning and the implementation of sound strategies. The planning process should include each of the following steps:

- the establishment and analysis of goals,
- a review of the various options including an insurance needs analysis directed to attain the goals, and
- involvement of a qualified professional to provide tax, investment and estate planning expertise.

Insurance may be defined as a contract in which one person pays money, which is called a premium, to a second party, known as the insurer, who promises to reimburse the individual for **specified losses**, should these losses occur. Insurance is a way to distribute losses and eliminate uncertainty. Insurance can be thought of as the reverse of gambling.

One of the basic principles of insurance is that of indemnity. Indemnification simply comprises compensation to an insured, such that he or she is in the same financial position after a loss, as they enjoyed before the loss occurred. Note that it is not intended for insured individuals to profit from an insurance settlement.

The concept of insurance is relatively simple. People who face potential losses band together to establish a fund with which to compensate those who actually experience disaster. The principle of risk sharing is applied when large numbers of people pay a regular fee, which is known and therefore certain, in exchange for protection against a hazard that is uncertain.

The premium paid by individuals is composed of the pure cost of insurance plus a loading charge, with the loading charge representing the insurer's costs including a profit.

The pure cost of insurance is dependent upon three factors:

- the probability of the event occurring,
- the cost of the compensation, and
- the number of individuals sharing the risk.

Insurance planning is essentially a risk management activity. Risk management can be defined as the assessment of the size of a potential loss and the probability of its occurrence.

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**The five steps in the risk management process include:**

1. The identification of potential risks,
2. The evaluation of the risks,
3. The controlling of the risks,
4. The financing of the risks, and
5. Monitoring of the risk profile.

There are a number of methods of handling or managing risk. The most common methods include:

***Risk avoidance***

Risk avoidance simply means that an individual can evade certain risks merely by staying away from the risk that one chooses not to incur. For example, an individual will not die in a plane crash if the individual chooses not to fly. An individual will not be arrested for drunk driving, if the individual does not drink and drive.

***Risk reduction***

The reduction of risk involves some positive action that is taken. Common examples of risk reduction would include the installation of dead bolt locks, or the use of smoke detectors in a home.

***Risk retention***

The retention of risk means that an individual chooses to self-fund any losses that may be incurred. For example, an individual may choose a deductible of \$1,000 on their automobile insurance coverage. This indicates that the individual is prepared to personally pay the first \$1,000 of damage incurred in an auto accident.

***Risk transfer***

The transfer of risk simply means that individuals who are unable, or unwilling, to bear a particular loss may transfer this uncertainty to a third party, usually an insurance company, who is prepared to accept the risk. Risk transfer is the most common method of managing large risks and this is the topic of the current chapter.

Not all risks are insurable and insurance companies only deal with those that are. The factors determining an insurable risk include:

- the loss must be definable and quantifiable,
- the loss must be accidental, or occur as a result of chance events,
- the loss must be large enough to cause financial hardship, and
- the cost of insuring must be economically feasible.

Additionally, an insurable interest must exist. Insurable interest is a person's real financial interest in an object or in another person.

## **Types of Life Insurance Coverage**

There are many reasons why an individual would have life insurance, including the desire to:

- create an estate for the heirs before one has the opportunity to accumulate an estate,
- supplement the existing estate,
- payoff outstanding debts,
- pay estate settlement costs such as legal or probate fees,
- protect an individual's business interests or investments, and to
- create a charitable donation.

Life insurance for many people tends to be a very confusing subject. This confusion arises because a few basic types of policies have been expanded upon and elaborated with special features with a bewildering variety of names, which vary among each of the many life insurance companies licensed to do business in .

Life insurance can be either term insurance or permanent insurance. All other forms of life insurance are variations of either term or permanent.

Life insurance policies are based on mortality tables. Mortality tables are used, by actuaries, to calculate life expectancy's or the probability of dying. A mortality table is based on an original hypothetical cohort of 100,000 individuals and for each year after birth, a calculation of how many of the 100,000 in the original cohort are still alive. Mortality tables exist for males and females. Since the probability of any individual dying increases every year, the pure cost of life insurance coverage increases with age.

The pure cost of life insurance coverage for any specific age can be closely approximated by calculating the insurance policy death benefit times the annual mortality rate. For example, assuming a mortality rate of 0.28% for a 45-year-old male requiring an insurance policy of \$500,000, the premium is equal to \$500,000 times 0.0028 = \$1,400. The premium for the following year, assuming a mortality rate that rises to 0.30% for a 46 year old male, would amount to \$1,500. Moreover, by age 50, at which time the mortality rate has grown to 0.45%, the annual pure cost of insurance would increase to \$2,250.

## **Term Insurance**

Term insurance is also known as pure insurance. Term insurance has no cash or savings value included within the policy and is the simplest type of life insurance to understand for most people. As the name suggests, term insurance protects for a limited and specified time i.e. the term. The term can vary from one year to age 100. There are many variations of term insurance available to s.

The most basic type of term insurance is known as annual guaranteed renewable term (ART). ART is typically found in a group insurance policy provided by many employers to their employees. An annual guaranteed renewable term policy would rise in price each year (at renewal) as the insured ages. Guaranteed renewable means that coverage will continue in effect, until the end of the term, without having to undergo further medical underwriting qualification, as long as the insured agrees to pay the increased premium. An annual renewable term policy is the most cost-effective method of purchasing life insurance coverage for a short period, since the pure cost of insurance is recalculated and increases each year. A disadvantage of ART is that it becomes prohibitively expensive for an older individual.

At the opposite end of the spectrum from ART with its annually increasing premiums, is level premium term insurance. Level premium term insurance, as the name suggests, carries a premium which is unchanging. By necessity, level premium term insurance must charge premiums that are higher in the early years than ART, and lower than the premiums charged for ART at later ages. It is possible to purchase level premium term insurance for terms to age 65, age 75, or to age 100.

In between these two extremes, term insurance policies are often described as step terms. Step term policies are the most common type of term insurance policies that are encountered in the term insurance marketplace. Step term policies typically have a premium which is level for some specified time. The most common, are policies with premiums that are level for five or ten years. If the policyholder decides to keep the policy (renew it), then premiums are adjusted upward and remain level for another five or ten years at which point the premiums rise again and are fixed for another five or ten-year period. An individual can purchase five-year term to age 65. The policy expires when the insured reaches age 65 i.e. coverage ends. Also commonly available are ten-year renewal step term policies to age 75.

Decreasing term insurance requires the payment of a premium; however, under this type of term insurance the death benefits reduce over time. An example of decreasing term insurance is called mortgage insurance. As a mortgage is repaid, over time the outstanding principal declines, as does the death benefit. It is important to note that a policy with a decreasing death benefit combined with a level premium means that the pure cost of coverage per \$1,000 of death benefit must be rising.

Most term insurance policies offered in the marketplace are guaranteed renewable; however, a review of the policy declaration sheet can quickly confirm this. The declaration sheet will also delineate the maximum premiums that are required to be paid at each renewal. Insurance companies cannot charge more than this maximum premium but for example, due to favorable mortality experience, the insurer may charge less than this amount.

Additionally, most term insurance policies contain a convertibility feature. Convertibility allows the insured to convert a term insurance policy, without having to medically re-qualify for coverage, into another policy that is usually a type of permanent insurance offered by the same insurance company. The convertibility feature will usually contain restrictions such that the conversion feature must be exercised before some specified date, such as age 60.

Conversion of an existing term policy might be advantageous to an individual who requires permanent life insurance coverage but who can no longer qualify for a new policy due to poor health.

## **Permanent Insurance**

Permanent insurance usually contains a savings component in addition to the life insurance death benefit.

### ***a) Whole life***

The premiums payable on a whole life policy are usually level for the lifetime of the insured. The level premium means that the insured is over paying the pure cost of coverage in the early years and conversely, under paying the pure cost of life insurance coverage in later years. This overpayment of the premium is retained and invested by the insurance company and forms the policy reserves. The reserves ensure that the insurance company is able to continue coverage in the later years due to an underpayment of premium as the life insured ages. The reserve is owned and controlled by the insurance company. If an insured individual cancels this type of policy, they will receive the cash surrender value (CSV) of the policy, which is usually some percentage of the reserve. The CSV of the policy is guaranteed under the terms of the contract and is found in the declaration sheet of all whole life policies.

## ***b) Universal Life (UL)***

Universal life insurance (UL) was originally introduced into the marketplace in the early 1980s. UL is a contract that allows the policyholder flexibility. Universal life insurance combines term insurance, in case of the insured's premature death, with a tax-deferred savings component. Cash values may be creditor protected. Additionally, cash values plus the face value of the term policy can be paid tax-free to the beneficiaries as a death benefit. Cash accumulating life insurance policies would not usually be set up as holdings within an RRSP or RRIF.

Universal life policies are purchased for the death benefits. An equity-based UL policy may provide a gain due to capital appreciation. Investors anticipating high inflation and rising interest rates would not choose a UL policy whose investment component is based upon fixed income bonds but might instead select one that is based upon equity markets, or one that is money-market oriented. Most UL policies permit switching between stock, bond, and money-market indices to provide for maximum flexibility. Premiums vary widely with the type of underlying term insurance policy and with such factors as the age, sex, and health status of the life insured. Premiums include the pure cost of insurance, sales commissions, and insurance company operating profits. Some policies have penalties for cancellation before specified dates.

Policies can be fully paid up for life in as few as seven years, depending upon the contract purchased. UL policies may provide some inflation protection through their adjustable death benefits. Policies can also be cancelled and cash values claimed at any time. Accumulated premiums plus investment income performance determine the policy's cash value. However, the actual payments of cash values may require several weeks of processing time. It is strongly recommended that new insurance policies be in place before existing policies are cancelled.

Income earned on the cash value of the policy accumulates and compounds on a tax-deferred basis. Death benefits paid to beneficiaries are normally not subject to income taxes. With all cash accumulating life insurance policies, the cash values may be protected from creditors.

Life insurance policies do not trade on a secondary market.

In addition to the WebSite of the Life and Health Insurance Association (CLHIA), many of the insurance companies maintain their own WebSite's. A great deal of information is available and may be obtained by visiting these WebSites.

## Life Insurance Regulation and Risk

Insurance companies are regulated by the Office the Superintendent Financial Institutions (OSFI) federally, and by the provincial Superintendents of Insurance.

Risks faced by policyholders include:

- Policies that provide for market returns on cash value investments also carry market risk.
- A UL policy invested in a bond fund would lose cash value if interest rates rose, while one invested in stocks would lose in an equity market downturn. Policies that invest cash value in fixed income instruments, for example, are less subject to fluctuating income and reinvestment risk than a policy invested in money-market instruments.
- The Deposit Insurance Corporation (CDIC) does not insure life insurance cash values. The Compensation Corporation (CompCorp) covers life insurance companies in . life insurance companies are rated by services such as TRAC, DBRS, Standard & Poor's, and Moody's.

## The Insurance Contract

All types of insurance contracts tend to follow a similar template.

- *The preamble or declaration sheet.* Here information such as who is covered, the effective dates, the premiums to be paid, and the risks to be covered are outlined.
- *The insuring agreement.* In this section, details are provided as to the property to be covered and the perils against which coverage is provided. Important paragraphs in this section include the policy's exclusions and limitations. Is important that these limitations and exclusions be fully understood.
- *The statutory conditions.* These paragraphs are required by law (see below).
- *The policy conditions.* This section indicates what an insured must do in order to have coverage continue. The policy conditions state what the insured must do in case of loss and how the insured may recover after suffering a loss.
- *The signature clauses.* Insurance policies are signed and witnessed in this area.
- *Riders or endorsements.* These are modifications or amendments to the contract. Riders or endorsements are always appended to the contract and form part of the contract.



## **Statutory or Standard Life Insurance Policy Provisions**

Some of the more common life insurance policy provisions that are required by provincial statutes typically include:

1. Incontestable clause. After a policy has been in force for two years the life insurance company, except in the case of fraud or the intentional misstatement of health status, cannot contest a claim.
2. Grace period. The specified time usually 30 or 31 days, after which a premium is due, that an insurance policy's protection will remain in force. The overdue premium may be repaid and no penalty is applied if paid within the grace period.
3. Reinstatement. After a life insured has complied with the conditions stipulated in the policy, a lapsed policy can be restored to an in force and premium paying condition. The insured will usually have to submit to medical underwriting in order to reinstate the policy, and pay all of the back premiums plus interest. Typically, a lapsed policy can be reinstated within a two-year period.
4. Suicide clause. Most life insurance policies deny claims, other than the return of premiums paid, for death by suicides within the first two years that the policy is in force.
5. Ownership loan provisions. Typically, the policyholder can arrange for a loan from the insurance company up to the cash value of the policy. The interest rate that is to be charged on the loan and the method of its calculation will be stated within the policy.
6. Non-forfeiture options. These are the options, other than surrender, that are available to a policy that has accumulated cash value upon the policy's termination. The cash value may be used to purchase a reduced death benefit, paid up cash value policy. Alternatively, the cash value may be used to purchase extended term insurance.
7. Settlement options. Life insurance policies typically allow for several optional methods of receiving death benefits. The most common settlement options are: the receipt of a fixed amount each month until the proceeds are exhausted, a fixed period option which pays over a fixed time, or a life income option.
8. Dividends. A policy that participates in the profitability of the insurance company may pay dividends. Policy dividends are not guaranteed and may be thought of as a rebate of overpaid premiums. The policyholder will have a choice as to how dividends are to be paid. Typically, the policyholder is allowed to receive the dividend as cash, apply the dividend against premiums due, leave the dividend with the insurance company to accumulate interest, use the dividend to purchase one year term insurance, or use the dividend to purchase additional paid up cash value coverage.
9. Conversion. Typically contained in group insurance or term insurance policy. This clause allows the insured to convert to a permanent insurance policy issued by the underwriting insurer, within a limited time that is specified in the contract. The insured is not required to supply evidence of insurability when the conversion clause is exercised. The premiums paid for the permanent policy will be based on the insured's attained age.

## **Life Insurance Policy Riders include:**

- *Accidental death.* Provides extra coverage, typically equal to the death benefit of the original policy hence the name double indemnity. Benefits are paid if death is by accidental means.
- *Disability waiver of premiums.* This rider states that after a qualifying period specified in the contract, a totally disabled policy owner will not be required to pay premiums in order to have the life insurance remain in force.
- *Guaranteed insurability.* This rider allows the policyholder to increase permanent insurance coverage, at pre-specified future times, without having to supply further evidence of insurability.
- *Term rider.* This rider allows the addition of a term insurance policy to a permanent insurance policy.

## **Disability Insurance (DI)**

The most valuable asset that the vast majority of the adult population owns is their ability to wake-up each morning, and to go to work in order to create net worth and to earn the current income required to provide for a reasonable lifestyle. Without this ability, a great many would be in dire straits. There is a great deal of information which is readily available regarding life insurance and the choices that are available, and even more opinions and information regarding the appropriate choice of life insurance coverage in a given situation. More importantly however, research studies show that the probability of a significant period of disability is much higher than the probability of death at any given age up to normal retirement at age 65. Studies also point out that more than half of all disabilities exceed one year in duration. In fact, disability insurance and the continuing ability or inability to go to work in order to pay the bills is of far greater consequence than life insurance considerations for most working s.

## **Factors which affect the Cost of Private Disability Insurance (DI) Coverage**

The enforcement of disability claims is a matter of interpreting the disability insurance contract clauses. It is therefore particularly important when considering or evaluating disability insurance coverage that individuals understand the major terms and conditions of the disability insurance policy contract, which affect the premiums paid.

1. *Guaranteed renewable and noncancellable contract.* A disability insurance policy should be guaranteed renewable and noncancellable. If the policy is not guaranteed renewable and noncancellable, the insurer can cancel the insurance at their option, or, at renewal, they can require additional or increased premiums. Any policy that is cancellable and not guaranteed renewable will certainly be less expensive than a guaranteed, renewable, noncancellable disability insurance contract

2. The definition of total disability. There are many definitions of total disability contained within various DI contracts. The two most basic definitions are “own occupation” and “any occupation”. Under an “any occupation” definition if the insured has the ability to work at another job or occupation, then they will not qualify to receive benefits. If, on the other hand, an individual has a contract with an “own occupation” definition, and they cannot work at that occupation or job, they are entitled to receive benefits. It is therefore critical that individuals understand the definition of disability contained within their own policy contract. These simplistic definitions are included merely for illustrative purposes, and serve to reinforce the requirement to carefully review the basic definitions before purchasing DI coverage. As a rule of thumb, the definition of disability has the greatest effect on DI premiums. Therefore, everything else being equal, given two apparently identical DI policies, one which costs \$500 per year and the other which costs \$1,000 per year, look first at the definition of disability and next to the policy limitations and exclusions.

3. The elimination period. The elimination period is the time that must elapse after a covered disability occurs before benefit payments begin. Generally, the shorter the waiting period, the higher the premium. The elimination period is a form of deductible or self-insurance in that the longer an insured individual is prepared to self fund i.e. not receive any benefits, the less expensive the premium will be. Benefits can start as early as 15 days, or they can be deferred for as long as 2 years. Benefits are paid in arrears. Note that an individual, who owns a policy with the 30 day elimination period, does not receive a benefit check on the 30<sup>th</sup> day, but after 60 days. Benefits are received on a policy with a 90-day elimination period after 120 days.

4. The maximum benefit period. The maximum benefit period is the length of time for which benefits are payable to the insured. Some policies will pay benefits for a maximum of 2 years, others for 5 years, and the best policies pay to age 65.

5. The maximum benefit amount. All else being equal, the higher the maximum benefits payable, the higher the premium. There will be restrictions imposed by each insurance company that will limit coverage to a specified percentage of pre-disability earnings. Each insurance company will also have an overall maximum dollar benefit that can be paid to an insured.

6. Occupation. Certain occupations are far more prone to injury than others. White-collar professionals tend to be considered as low-risk occupations vs. blue-collar occupations. Certain occupations, which are considered dangerous or otherwise risky, may be excluded from coverage altogether by the insurance company.

7. Age. Disability insurance premiums rise with age.
8. Hobbies. Persons engaging in dangerous hobbies, for example, rock climbing or mountain climbing can expect to pay higher premiums.
9. Exclusions and limitations. A policy with fewer exclusions or limitations will carry a higher premium than a policy with many limitations and/or exclusions. Note that limitations and exclusions might limit or exclude coverage for persons who have pre-existing medical conditions.
10. Partial Disability. Typically, in order to receive benefits an individual must be totally disabled; however, it is not unusual for a physician to encourage an individual to return to work as quickly as possible, even on a part-time basis. Note that if the contract requires total disability on the part of the insured and the individual is able to work part-time, they are not totally disabled. They are only partially disabled and do not qualify for benefits. It is therefore very important to recognise and consider either purchasing a rider that allows payments of partial disability benefit or alternatively the purchase of a DI contract which already includes in the policy contract itself the ability to receive partial disability benefits.

## **Critical Illness Insurance**

Statistics show that s are surviving critical illnesses such as cancer more frequently now than in prior years. Improvements in medicine and medical treatments have resulted in promising prognosis' for many illnesses. However, the occurrence of critical illnesses is on the increase, and the facts indicate that approximately one out of every two men and one of every three women will encounter a critical illness during their lifetime.

Maintaining a similar quality of life after the diagnosis of a critical illness and dealing with financial commitments can cause hardship for individuals and their families. Critical illness insurance can protect a family's future. Generally, critical illness insurance will help to the pay off a debt, for example a mortgage, or to help provide funds that can be used for medical treatment in the event that one falls victim to specific illnesses including stroke, cancer, or heart attack.

## **Property Loss Insurance**

The majority of s will be affected by personal property, home, and auto insurance policy decisions at some point during their lifetime.

## **Property Insurance**

Property insurance includes insurance coverage for the risk of damage to personal property resulting from flood, fire, or vandalism. The most important personal assets for most s that require property insurance coverage are their homes and automobiles. However, property insurance can be purchased to insure furnishings, clothing, appliances, boats, or collectibles. It is usually recommended that personal property, furnishings and collectibles be listed and described separately, and that any master list including photographs be stored outside of the insured property, in a safety deposit box for example.

Typically, property insurance coverage is either “specified perils” or “all risks”. “Specified perils” provides protection only against those perils named specifically in the contract. An “all risks” policy is not limited to perils that are specifically named in the policy. The “all risks” policy, because of its wider coverage, is more expensive than the rather limited coverage provided by “specified perils” policies.

## **Homeowners Insurance**

A home is one of the largest purchases most people make during their lifetime. Therefore, homeowners insurance protection is prudent and strongly recommended. Usually, a homeowners policy covers damage to the home, out buildings (e.g. garage), contents, and injuries to a third party suffered on the property.

### ***1) Valuation of property***

Home insurance can be purchased for replacement value or depreciated actual value coverage. Replacement value can be described as the replacement of property with a new or comparable item and for this coverage, a higher insurance premium will be charged. Depreciated property coverage on the other hand, compensates the insured for the actual value of the property, considering its age and condition.

### ***2) Policy deductibles***

The deductible is the portion that must be paid by the insured party before the insurance company will make any payment. Higher deductibles will usually mean lower insurance premiums because:

1. The insured shares in part of the loss,
2. The insured is encouraged to settle their own small losses, and
3. The deductible is an incentive for the insured to avoid situations that may result in loss or damage.

### **3) Third party liability insurance**

This coverage protects homeowners, up to a specified limit, should a third party be injured while on the property.

Some of the factors to consider when purchasing this insurance include:

- the state of repair of the property,
- whether the homeowner has pets on the premises,
- the types of activities carried on at the home,
- the appropriate amount of coverage to cover losses. Generally, the minimum third party liability coverage recommended is \$1 million.

### **4) Types of homeowners insurance policies**

1. Fire insurance. Protects in case of fire, lightning, smoke damage, and other similar and specifically listed perils.

2. Tenant's or Renter's policies. These policies are purchased by renters, should their personal property such as furniture be damaged or lost. Typically, the renters policy also covers third party liability. It does not cover the building structure, since that is the landlord's property.

3. Comprehensive. This is the most common type of homeowners policy, and typically covers the building, contents, and third party liability. Comprehensive policies can be tailored to meet individual circumstances.

## **Automobile and Vehicle Insurance**

Vehicle insurance has various elements including property damage coverage, liability coverage including the death or injury of a third party, collision coverage, and comprehensive coverage. The various provincial legislatures require that the registered owners of an automobile or vehicle carry certain minimum insurance coverage's.

### **1) Liability coverage**

Liability insurance coverage includes the injury, death, or damages to the property of another party. In general, the owner's policy covers the immediate family and any other driver who has permission to use the vehicle. The limit of liability that is shown in the policy is the maximum limit for all of damages that may result from any one accident, regardless of the number of vehicles or people involved in the accident.

## **2) Medical payments**

This covers medical costs for the driver and passengers, if the driver is at fault. Generally, this coverage is mandatory in .

## **3) Collision coverage**

The importance of physical damage coverage to a vehicle is directly proportional to the value of the vehicle, and to the owner's ability to replace or repair the damage. Collision coverage pays for damage sustained in an accident for which the vehicle owner is at fault. Any damage suffered in a collision for which the other driver is at fault is covered by the other driver's automobile policy, under the property damage coverage.

## **4) Comprehensive coverage**

Comprehensive coverage is a form of "all risks" automobile physical damage coverage. Comprehensive policies pay for damage, resulting from non-accident causes such as a theft, fire, and vandalism. In order to be covered the damage must be from accidental rather than intentional means. For example, if someone locks their keys in the car and then breaks the window in order to retrieve the key's, this is considered intentional and is not covered.

## **5) Uninsured or under insured motorists coverage**

This is mandatory coverage. This provision covers bodily injury caused by another driver who is uninsured or under insured. This provision also protects against injuries suffered in a hit and run accident.

## **Insurance Policy Evaluation Checklists**

### ***Life insurance policy evaluation***

- Is the policy permanent or term coverage?
- Is the beneficiary designation current?
- What is the credit rating of the issuing insurance company?
- What is the purpose of the policy?
- When was the last time an insurance needs analysis was performed?
- What are the settlement options provided by the policy?
- What are the non-forfeiture options?
- What interest rate is charged on policy loans?
- What riders are included with the policy?

- Are the chosen riders still relevant?
- Which dividend option has been chosen?
- Which investment option has been chosen for a UL policy?

### ***Disability insurance policy evaluation***

- Is the policy noncancellable and guaranteed renewable?
- Is the definition of disability appropriate for the individual?
- How long is the elimination period?
- What is the insurers credit rating?
- For how long are benefits payable?
- What is the amount of the benefits payable?
- Is a partial disability covered?
- Does the policy cover residual disabilities?
- Are there any riders included with the policy?

### ***Homeowners insurance policy evaluation***

- Is the policy based on actual cost or replacement value?
- Is the amount of coverage appropriate?
- Is there personal property that needs to be listed and insured separately?
- Are covered buildings insured for at least 80% of the replacement value?
- Is the amount of liability coverage appropriate?
- Is the policy “specified perils” or “all risks”?

### ***Automobile insurance***

- How much are the deductibles?
- Is collision coverage required on an older vehicle?
- Is there coverage for uninsured motorists?
- Is the amount of liability coverage adequate?



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# Wealth Management Sales And Client Management

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## **1. Designing and Testing Your Value Proposal**

One potential source for magic bullets amounts to little more than old-fashioned marketing—developing a clear and compelling value proposition that meets your target market’s specific spectrum of needs’.

First, you will need to define your strategic plan in the wealth management market. What do you want to do? Are you offering wealth management services to boost shareholder value and return on equity or to prevent the departure of existing high-net-worth customers by providing a wider range of services? Clear articulation of your vision will make it easier for you to target customers and test your value proposition. Based on your goals, target specific segments of your market and begin testing your value proposal. Demographically, the wealthy tend to have wide-ranging needs that demand a one-to-one marketing approach. Focus groups and other market research methods can prove invaluable in gaining insight into the unique needs of the target segments in your region.

For example, successful wealth managers at private banks are gaining insight into the spectrum of needs of the wealthy. High net-worth customers, particularly those who earned their wealth, want a trusted advisor who provides highly personalized services and access to strong products. By contrast, retail banks, as well as many brokerages, are still operating in a model where the customer’s hierarchy of needs is assumed to be product first, then service, then advice.

By aligning your value proposition with your strategic ambition and customer segments, you can iteratively test it with real customers, gaining invaluable insight into your target market.

## **2. Prepare Human Resources**

Delivering on your value proposition, however, requires more than just a well-crafted offer. Unique skills ranging from sophisticated financial advisory services, relationship management, partnership management, and accounting services are required. Particularly if your value proposition emphasizes advisory services, you may require a significantly different approach to training and recruitment.

Retail banks and brokerages, for example, have typically established training programs that emphasize products and customer service over advice. Because it’s unlikely you will find all the wealth management skills in one person, you may need to form a team of specialists, together providing the necessary services to the customer. A team-based structure will leverage core skills across a larger market segment—and may scale more readily than a search for fully qualified individual talent.

### **3. Remember, Wealth Management is Sold, not Bought**

With a clear value proposition and recruitment plan in place, the next consideration is the development of your sales force and sales management processes. Because most wealth management sales are very advice centred, your sales program will require a disciplined management strategy to boost qualified lead generation.

On an industry-wide basis today, even for organizations with successful business models, it's surprising how low the sales success rate is. Research reveals that even dedicated business development officers typically only spend a third of their time selling—only scratching the surface of potential opportunities. But traditional massmarketing tools such as advertising are inadequate for wealth managers—they don't target the right segments, and are typically not trusted or valued communications among the wealthy.

To win the trust of the wealthy, particularly when trying to attract their business, your sales force is the only precise, one-to-one medium for marketing. They need to integrate into their prospecting strategy considerations for the lifetime events that cause people to make wealth management decisions.

### **4. Use Technology, MIS and the Web to show Customers You Understand their Needs**

Of course, no factor has changed the nature of wealth management more than technology. The newly wealthy in particular are part of the ubiquitous consumer trend that demands more self-service control of the customer experience, with any channel, specifically tailored to their needs.

Given these demands, and the need to regularly market-test and fine-tune your business model, make sure your systems architecture has the same degree of flexibility, including:

- Support for all needed advice services
- Support for wide range of investment instruments
- Easy connectivity to partners and providers
- Easy access to sales metrics, such as sales payback and relationship profitability
- Multi-channel functionality to satisfy technically sophisticated client segments
- Support for an open product source architecture

## **5. Open Architecture Product Set – Show Them the “Best of the Best”**

The final, but critical, component of a winning business model is the ability to support open–architecture product sourcing. By providing financial products from a growing number of product sources, wealth managers will reinforce their advisory services by keeping products in perspective.

Positioning open product sourcing as offering “the best of the best” is an approach that enhances credibility and gives clients the breadth of asset classes needed to support client portfolio optimisation.

### **Who are the Affluent?**

In an earlier era, it was easier to identify the affluent. People lived in smaller communities where the affluent were more visible. They either benefited from inherited wealth or were prominent community leaders and/or business owners.

Today, the definition of people who qualify as affluent is much broader than it once was. It is possible to earn or acquire substantial wealth from a wide variety of activities—everything from managing the corner grocery store to winning the lottery. If someone decides to buy stock in the right start-up venture today and waits patiently for a couple of years, that person has a good chance of becoming a millionaire. Or if someone puts money away in a savings program on a regular basis, he or she is likely to build up quite a good-sized nest egg.

And with people moving from community to community, it’s harder to distinguish those who can well be classified as affluent. In many cases, you don’t know or you can’t know.

### **Customer Service Expectations of the Affluent**

While the affluent can look and sound like everyone else, don’t think for a moment that their expectations of you and your company are the same. Although you might not recognize the person standing in front of you or calling you on the phone as a person of substantial means, there are other organizations that recognize the signs of wealth and have developed techniques for catering to them.

It’s these other organizations that set the level of expectations for serving the affluent well. How do the expectations of the affluent differ from those of the less affluent? The affluent are more likely to:

- *Think and act like businesspeople.* Whether or not the source of their wealth is derived from business, the affluent use businesslike decision-making processes. They have formalized methods of buying products or services. They prefer long-term strategies. They are likely to use experts to help them with their decision making.
- *Demand personalized service.* The affluent expect to have people pay particular attention to them and their needs. They want to be recognized immediately (by sight or by the sound of their voice); once recognized, they want to receive quick, efficient service to their needs, and they want this service to be delivered in a friendly, supportive environment.
- *Insist on “extras.”* The wealthy expect to be given more than the less affluent in the course of receiving service. They want and expect small perks, such as a special area set up for their own needs or small tokens of appreciation.
- *Get references from others they trust.* The affluent tend to be protective of themselves and people they determine are their peers. Thus, before finding a source for service, they are most likely to seek out references from those of their own group whose opinions they respect.

## **Techniques for Providing Customer Service for the Affluent**

Given that the affluent have high expectations of your service, how do you ensure that you'll meet (or exceed) their expectations? Here are three techniques that might be helpful in making sure you are giving affluent people the type of service they want:

### ***1. Don't make assumptions about your customer before you have proof***

There are many versions of the story of the man who walked into a Cadillac dealership wearing torn overalls and no shoes, who asked to see a car. The salesperson made a snap decision that this person could not afford a Cadillac and promptly told him so, at which point the customer pulled out a roll of hundred dollar bills more than sufficient to buy any car in the showroom.

Given that today it's hard to tell the affluent from the people with fewer assets, it's easy to get pulled into making assumptions about who belongs in that special group. Rule number one is to never make an assumption about any person until you have proof of who that person is, or who that person knows.

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## ***2. Provide instant recognition***

If you have talked to or helped an affluent person before, make note of who that person is, so that in the next interaction, you can provide instant recognition.

Many clubs and organizations take pictures of their members so service staff can recognize them. Other companies use systems to flag a unique piece of information (such as the social security number) to help staff people recognize an affluent, influential customer right away. If your company does not provide you with tools to help you recognize your most valued customers, build your own.

## ***3. Remember customers' preferences***

Once you've recognized a customer, you are now prepared to help that person. Every time you see or speak to any of your affluent customers, you should be making notes on their preferences—how do they like to be addressed, what procedures for service do they prefer, how do they like to find out the results of your task, which types of products or services are they most likely to inquire about, etc. At every new encounter, you can use this information to make each one of your affluent customers feel very important.

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## Credit And Debt Management Credit And Debt And Leverage Management For The Wealth Management Professional

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Even the wealth will incur some form of indebtedness, whether it is in the form of a mortgage, vehicle loan, or credit card debt, at some point during their working lives. Ensuring that debt, and its inherent cost, is minimized before retirement will provide a retiree with a more positive cash flow.

Credit can be defined as a financial transaction that involves the lending of money and the transfer of property with the promise of repayment by a fixed maturity date. The transfer of property in a credit transaction is only intended to be a temporary expedient.

The lender is the grantor of credit, and is known as the creditor. The borrower is said to be the debtor. Credit and debt, and the lender and the borrower are therefore, on opposite sides of the same coin.

Debt is a contractual obligation that is enforceable by law.

The cost of debt is a function of the principal borrowed, the interest rate charged, and the frequency with which the interest is compounded. The interest rate charged by the creditor is the price of the loan and the rate reflects the creditor's risk. Generally speaking, the more frequently that interest is compounded the worse it is for the debtor in terms of total interest costs. Conversely, the more often that interest is compounded, the better the situation from the creditor's perspective.

A consumer can arrange credit so that it is open-ended, closed-ended, secured, or unsecured. Revolving credit is also known as open-ended credit. Under the terms of a revolving credit arrangement a limit is pre-authorized and extended. The consumer determines when and the amount of credit to be drawn, and is only required to pay a minimum amount, usually monthly. In other words, this credit line can be charged up and paid down within the pre-authorized restrictions. Common examples of revolving credit would include credit cards and lines of credit.

Credit also exists in a closed-end form. According to this arrangement, the debtor must pay the principal plus interest according to a pre-arranged and agreed-upon schedule. An example of this type of credit is a mortgage.

Finally, credit can be arranged as either secured or unsecured. Security is usually provided either in the form of collateral or by a specific guarantee. Generally speaking, all else being equal, a secured loan carries less risk than an unsecured loan and therefore a secured loan carries a lower interest rate.

## **The Advantages of Using Credit**

- Having pre-arranged credit minimizes the need to carry cash or a checkbook. As long as re-payments are made promptly, having credit is a convenience.
- A consumer can more easily make large purchases immediately rather than having to wait and save enough cash to pay for the purchase. This can sometimes be viewed as a form of forced savings.
- Conveniently able to make purchases using telephone, fax, or over the Internet.
- Can be viewed as a source of funding in case of emergency.
- The ability to buy now rather than having to wait can be advantageous in an inflationary economic environment. Borrowers tend to benefit more than creditors during periods of inflation.
- Financing the purchase of investment assets with debt generally increases net worth over time, and can be structured in order to minimize the income tax consequences, which then effectively becomes a tax shelter.

## **The Disadvantages of Credit**

- The convenience of having credit available means living with the temptation of impulse buying.
- Problems can arise if one loses track of spending between statement dates.
- Underestimating the true cost of credit. The interest cost on unpaid balances can be very high, especially for credit cards. Some of the information provided by the grantors of credit is not easily understood. In addition to interest cost, a borrower must also consider any additional hidden fees, which increase the cost of borrowing. Additional cost may be incurred for life insurance, disability insurance, and other loan enhancements.
- There is a potential security risk of giving credit details over the telephone, fax, or Internet to unauthorized parties.
- The loss of financial flexibility and freedom due to the increase in ongoing fixed interest cost, and the commitment of future income to debt repayment.
- The magnification of losses when using leveraged investments, which perform poorly.
- Borrowing to finance the purchase of depreciable property or for current consumption can decrease net worth.

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## **The C's of Credit**

Factors are considered by all lenders, in varying degrees, when they review requests for credit.

### ***Character***

Character refers to the borrower's reputation. Researching a borrower's reputation will involve looking at past payment performance and a review of spending habits to date. One important question from the lenders perspective is the purpose of the loan. The lender is concerned with the quality of the loan's purpose; an acceptable purpose for a loan is to borrow funds to buy a home. It might be considered a poor purpose to try to obtain a loan to pay out a bankruptcy debt.

### ***Capacity***

Here the lender is considering the debtor's ability to re-pay the loan and interest in a timely manner. The lender will be interested in reviewing the borrowers continuity of income. Stability of income through long-term employment is desirable. The lender will often perform ratio analysis when determining debt capacity.

### ***Collateral***

The amount of security or collateral that one can pledge to securitize their borrowing, will be a factor when determining the total amount that can be borrowed. Although collateral may make a loan safe it cannot make a loan sound.

Collateral is intended to induce the borrower to be orderly and timely in the re-payment of the loan since collateral is used for partial or full recovery if the borrower is unable to pay the loan according to its terms. Additionally, collateral is required to ensure that the borrower has a stake in the loan transaction. Some types of collateral are considered better than others from a lender's perspective. Good quality collateral can come in many forms including equity in a home, or financial assets such as guaranteed investment certificates (GICs), Savings Bonds (CSBs), or term deposits (TDs). Poor forms of collateral are personal assets like a stamp collection or jewelry, which have limited resale potential. A guarantor or co-signer who signs on a loan to provide support for the credit is equally responsible for the obligation and the re-payment of all debt. The assets held within RRSPs and RRIFs cannot be pledged as collateral for credit.



## ***Capital***

A lender is interested in a borrower's ability to repay the loan plus accrued interest in case of any unforeseen circumstances. Common occurrences that may require a capital injection include unemployment, illness, or a marital breakdown. Items that a lender would consider appropriate capital include investments and rental properties. A registered retirement savings plan (RRSP) is considered capital as individuals have saved in order to accumulate this capital sum and in emergency, it can usually be redeemed. It is important to note that liquidating an RRSP will result in lowering net worth, and will incur income-tax withholding remittances.

## ***Credit history***

A borrower's credit history in the form of a credit report is used to evaluate the lender's risk.

The credit report, which is obtained from the local credit bureau, contains such information as the borrowers name, address, age, debts owed, employment/occupation, prior residential addresses and litigation details. Some information such as mortgage debt may not be listed in the credit reports as not all financial institutions share this debt history information with the credit bureau.

The credit bureau's members are area merchants and lending institutions that deal with consumer credit. Members are required to file information with the bureau. In return, these companies can refer to the credit bureau for information, as required. These members usually pay a user fee each time they access the credit bureau database. Since there is a time delay between when creditors report to the bureau and when the credit bureau actually records the transactions to the credit report, the bureau report may be out of date. Dun & Bradstreet produces similar reports for commercial lending purposes.

Danger signals which may indicate credit instability include the inability to meet past payment obligations, credit abuses, an applicant who lives beyond their means, no collateral, pending or prior lawsuits, a loan for a poor purpose, frequent job shifting, numerous inquiries to the credit bureau, frequent changing of residence and any lack of full disclosure to the lender.

Individuals can access their personal credit report by telephoning or visiting their local credit agency or bureau.

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## Types of Credit

### 1. Mortgages

The largest financial commitment for most people during their lifetime is the purchase of a home, and the subsequent mortgage commitments that homeownership entails. Therefore, it is imperative that purchasers educate themselves by studying and understanding mortgage features and restrictions.

The financial terms and conditions of a mortgage contract would include:

- the loan amount,
- interest rate,
- amortization period,
- loan to value ratio,
- term, and
- pre-payment privileges.

Each mortgage is a unique contract negotiated between the mortgagee (lender) and the mortgagor (borrower). It is prudent to review the mortgage contract with a financial advisor and a legal representative (lawyer or notary) **before** signing the document.

The mortgagee (lender):

- must be sure that the mortgagor holds clear title before the mortgage is arranged,
- must register the mortgage as security,
- must provide the mortgagor with the funds when needed, and
- must provide a discharge of the mortgage loan when certain circumstances arise.

The mortgagor (borrower) covenants to:

- make payments on time,
- pay the property taxes,
- insure the property,
- keep the property in good repair, and
- not sell the property without the mortgagee's written approval.

The loan to value ratio compares the loan amount to the value of the property for which the mortgage is made. A conventional mortgage has a loan to value ratio of 75% or less. This implies a down payment of at least 25% on a property that is purchased, and it means that the homebuyer therefore is borrowing less than 75% of the home's purchase price or appraised value.

A mortgage on a property for which the down payment is less than 25% is called a high ratio mortgage. A high ratio mortgage means that the loan to value ratio is more than 75% but less than 95%. A high ratio mortgage must be insured and this can be accomplished through Mortgage and Housing Corporation (CMHC). CMHC requires all high ratio mortgages to be insured and the maximum insurable mortgage loan is 95% of the property's value. Borrowers may deal with their choice of a variety of lenders approved by CMHC in order to receive the CMHC insured mortgage. Approved lenders include most chartered banks, trust companies, credit unions, and life-insurance companies. CMHC will collect the insurance premium from the borrower and this insurance premium ensures that the lender will be fully repaid in the event of the borrower's default.

### ***Amortization***

Amortization is the length of time over which the loan, principal plus interest, will be fully repaid. Generally, the amortization period can be up to 25 years. Everything else being equal, the longer the amortization of the loan, the lower the required payment. One important wealth management consideration is to shorten the amortization of the mortgage (or any loan) in order to reduce the total interest costs paid to the lender and to build equity in the property as quickly as possible.

### ***Term***

Term refers to the length of time for which the lender will, according to the contract, advance the money and for which the interest rate on the mortgage is fixed. Mortgage terms typically vary from six months to ten years. Generally speaking, the longer the term, the higher the interest rate. However, there have been occasions when the short-term interest rates have exceeded the long-term rates.

An open mortgage may be paid in whole or in part at any time and for this privilege, the interest rate is higher than on a closed mortgage. An open mortgage is appropriate when the borrower knows that they will be coming into additional funds, or if they plan to sell the home within a short period of time. An open mortgage would also be considered appropriate if interest rates were expected to fall. Generally speaking, open mortgages are for short duration, typically six months. In contrast, a closed mortgage has its interest rate set, along with other fixed conditions, for the length of the mortgage term. A closed mortgage usually cannot be repaid in full before maturity without incurring interest penalties. Interest rates on closed mortgages are typically lower than the interest rates charged on comparable open mortgages. The advantage of a closed term mortgage is that the interest rate and payment are locked in for the chosen term. This provides the borrower with cash flow certainty and peace of mind.

## ***Mortgage underwriting and the qualification process***

A mortgage provides the lender with two types of security. There is:

- the personal covenant of the mortgagor to re-pay and secondly,
- the security of the property that is being mortgaged.

With an owner occupied principal residence there will be no income generated, therefore the creditor is assessing the ability of the borrower to make and maintain all of the contracted financial commitments including the mortgage cost. The lender also assesses the value of the subject property and the character of the borrower as part of their decision-making process.

The assessment of character includes a review of creditworthiness. This is facilitated by a number of means:

### ***1) Credit application***

- A typical credit application will request details in terms of the amount of the loan requested and a statement of the purpose for the loan. The application will also provide details of the applicant e.g. name, age, address, employment, income, assets, liabilities, and ongoing expenses.
- Specifics are also required with respect to the legal description, address, location, and details of the property to be mortgaged.
- Credit applications typically contain a permission clause, which authorize the lender to contact references, verify employment, and to access the applicant's credit history.

### ***2) Credit analysis***

- The purpose of a credit analysis is to determine the borrower's ability and intention to fulfill the financial obligations. This analysis is facilitated by the use of financial data that is provided in the loan application and historical data, which is located in the credit report. Analysis of income, expenses, assets and liabilities is essential.
- Great importance is attached to confirming an applicant's annual gross income, since this value is critical in determining the maximum size of a mortgage or loan that can be prudently advanced by the lending institution.

### ***3) Appraisal of security***

- In order to determine the lending value of the underlying property, a professional appraiser provides an assessment of the property's current fair market value (FMV) for lending purposes.

- The appraisal of real estate uses three approaches: the cost approach, sales comparison approach, and the income approach to establish appraised values.

#### **4) Constraints to lending**

- A major constraint to any real estate lending decision is the loan to value ratio. The loan to value ratio establishes the owners net equity in a property. This ratio is based on the loan amount in proportion to the property's appraised value.
- A second major constraint is the ability of the mortgagor to service the debt. Potential borrowers are often overly optimistic regarding the size of the debt that they can carry. For this reason, lenders will factor into their debt servicing calculations, the additional costs of homeownership as well as purchase costs such as fees charged by CMHC, insurance premiums, appraisal fees, mortgage brokerage fees, land transfer taxes, GST, condominium fees and annual heating costs.

#### **Mortgage Default**

In the event of default on a mortgage agreement, the lender has the following remedies available:

- 1) Sue on the personal covenants for non-performance,
- 2) Take possession of the property,
- 3) Exercise power of sale, or
- 4) Foreclose title.

#### **Power of sale**

The mortgagee upon default on a mortgage agreement often seeks this remedy, because it is expedient. Since there is no court action involved and there is no statutory waiting period for the mortgagor to refinance, the procedure is quick and inexpensive. This option is most attractive in a stable or rising real estate market where the mortgagee can recover principal and interest. If the property is sold at a price above the amount owing, any remaining funds are paid to the mortgagor. If, after the sale, there is a deficiency, this deficiency is recoverable against the mortgagor.

## ***Foreclosure***

Under a mortgage foreclosure, the mortgagee sues for both possession and for payment. A foreclosure can involve a lengthy legal process. Foreclosure is pursued when it is worthwhile to own the property. Alternatively, foreclosure can be viewed as a powerful inducement to a mortgagor to keep current and not to allow payments to fall into arrears or the mortgage to default.

## ***Mortgage jargon***

**Assumable.** This mortgage feature allows a homebuyer to assume an existing mortgage on the purchased home. This can be an attractive selling feature if, for example, the mortgage carries an interest rate that is lower than the current market interest rate. Homebuyers will have to qualify to carry or assume the mortgage debt in order to release the vendor from the responsibility of the mortgage.

**Convertible** mortgages can be converted at anytime into a longer-term mortgage, without fees or penalties. This feature is attractive if interest rates start to rise.

**Portable.** Some lenders allow the transfer of an existing mortgage to a new property, subject to certain qualifications. A portable mortgage is appropriate when the borrower has negotiated an attractive interest rate and wishes to maintain that interest rate.

**Reverse** mortgages can be arranged to provide homeowners with income from the equity they have accumulated in their residence. These plans, also called equity conversions, are sometimes referred to as a homeowner income plan. The process consists of a lender providing funds, secured by a mortgage, which are used to provide income to a homeowner. These income payments may be structured in such a fashion as to minimize or even eliminate income taxes. Upon death, this loan is repaid, often from a sale of the property. This type of financing can have dramatic impacts on the homeowner's estate. Reverse mortgages may work well for homeowners who are asset rich but cash poor, and do not wish to relocate, but nevertheless need to supplement their retirement income.

A **second mortgage** ranks behind a first mortgage in security. This higher credit risk on the part of the lender is usually reflected to the borrower through the use of a higher interest rate that is charged on the second mortgage.

**Split term** mortgages are a mix of any two or more mortgage terms in one mortgage product. The advantage of this option is that both an open and a closed term can be held within this one mortgage.

**Variable-rate (VRM)** The interest rate on this type of mortgage is re-adjusted according to a formula set out in the mortgage contract. Typically, interest on a VRM compounds monthly rather than compounding semiannually, as is the case of a conventional or high ratio mortgage. The interest rates are usually tied to the prime rate or to T-bills. Some VRMs set a cap on the maximum interest rate, or may limit any single adjustment. A VRM is very attractive when interest rates are declining and can in fact reduce the amortization period. Conversely, if interest rates are rising it is possible that payments may not be high enough to cover interest charges and the shortfall is added back to the principal.

**Vendor take back** is a mortgage provided by the vendor. This type of financing is sometimes set up as a second mortgage with commensurate higher interest rates. The vendor's motivation is typically to increase the appeal or saleability of the property.

## 2. Loans

Loans can be arranged such that they are either secured or unsecured by collateral. The risk in granting a loan from the lender's perspective determines the interest rate to be charged. A promissory note is a form of unsecured loan. An unsecured, personal line of credit is a form of a signature loan. Without collateral, the security for unsecured loans is essentially character, integrity, and past credit performance.

A term, or installment loan, which is usually for a specific purpose, has an amortization schedule providing for regular payments. In the case of a fixed installment loan both the term and the interest rate are fixed and do not change over the term of the loan. In contrast, a variable loan carries an interest rate that floats, usually with the prime lending rate. A renewable loan has an interest rate, that is set for a period of time e.g. six months, at which point the loan renews at the current market interest rate. These types of loans are readily available at banks, trust companies, credit unions, and finance companies.

Demand loans are usually secured by collateral such as guaranteed investment certificates (GICs), Savings Bonds (CSBs), term deposits (TDs), mutual funds, or other financial assets. Because the collateral is relatively liquid, demand loans generally carry a lower interest rate than other types of loans. The interest rate charged on a demand loan usually is not fixed and will vary with the prime lending rate. A demand loan can be pre-paid anytime without penalty. As the name suggests the lender, with 24-48 hours notice, can call a demand loan. A margin account at a brokerage firm is a good example of a demand loan.

Overdraft protection is generally short-term protection provided by a financial institution to cover short-term cash shortages. Usually, overdraft protection is attached to a checking account to prevent non-sufficient funds (NSF) charges.

### **3. Credit cards**

There is a tremendous proliferation of easily available credit in the credit card market. One major contributing factor to the growth of credit is the securitization of asset-backed securities.

Credit cards are a form of revolving credit.

Interest charges and calculations vary from card to card. Some cards charge annual fees, while other credit cards include extras such as air mile travel benefits. There are substantial differences between bankcards and credit cards issued by retail outlets, and these should be researched before obtaining this type of credit.

### **4. Lines of Credit**

In recent years, the line of credit has evolved as a very popular and flexible financing option. A line of credit offers several advantages to consumers including:

- A credit limit, when approved, is available to be charged up or paid down at the holders whim.
- A line of credit can serve as an emergency fund.
- Credit can be accessed when the holder wishes to make a purchase or needs to access funds quickly.
- In some circumstances, when a line is paid down to zero there is no cost for keeping the credit line open.

The line of credit is a very flexible product and is suited to consumers who can prudently manage their own credit. There are two types of lines of credit, secured and unsecured. Credit lines can be secured by assets such as a home, stocks, or bonds. With collateral in place such as the above, a secured line of credit will usually bear a lower interest rate, as compared to an unsecured line.



## **5. Leasing**

Essentially a lease allows a consumer (lessee) to rent a vehicle or other asset from a vendor (lessor) for a specified period of time at a particular cost. The lease payments cover financing costs, depreciation and other expenses that are incurred over the life of the asset.

Many individuals are strong supporters of leasing due to the perceived flexibility and low initial cash outlay that it provides. If a vehicle is needed for only half of its useful life, a lease can eliminate the time and effort required to dispose of the vehicle after it is no longer needed. Moreover, if technology will rapidly make an item obsolete e.g., a computer, a cancellable lease can protect the consumer.

A lease potentially provides a greater degree of financing since purchases financed by a loan typically require a down payment, or collateral, of 20% or more. Lenders are very reluctant to lend 100% of the cost for any item that is used as collateral. Therefore, the individual with a need but no cash may not be able to obtain the necessary financing. A lease provides an alternative way to consume today, with no equity commitment.

Leases, however, tend to cost more than loans. This is to be expected considering the risk and return issues. Certainly, the leasing company (lessor) bears more risk than a creditor, because the lessor bears all of the normal risks of ownership, such as establishing that insurance is maintained. Further, while the consumer (lessee) has more flexibility to avoid technological obsolescence, the lessor charges a higher rent because they now bear that risk. The same is true with respect to 100% financing. The potential loss due to default is greater to a lessor than to a lender of other types of credit because there is no collateral with which to absorb losses in the event of repossession.

In some circumstances, leasing may be more efficient. Consider the family that needs two cars. If they lease the vehicles, they may pay more for them than if they bought them outright, but they might get a service contract with the lease. The leasing company may be willing to give a discount on service, in order to get the lease.

Who owns the property at the end of the lease? Unless it is specified in the lease contract, the property belongs to the lessor. The lessor stands to gain from any increase in the value of the property. Frequently, this right of ownership upon termination of the lease is given to the lessee for “free”. In such leases, the monthly lease payments are higher than they would normally have to be if the lessor retained the ownership of the property.

None of these considerations provides absolute support for leasing. There are some benefits for the lessee, but they tend to raise the risk to the lessor, who therefore charges a higher price. Clearly, by adding a go between instead of buying directly, the additional party must earn a profit and this profit must come from the lease payments.

## **The Advantages of Using Leverage**

Leverage refers to using borrowed funds (debt) to finance the purchase and ownership of assets, to magnify the return on investment. Leverage is often measured by the debt/equity ratio. The debt to equity ratio is calculated as total debt (current debt plus long-term debt) divided by net worth.

The use of debt imposes fixed and legally enforceable recurring costs, on a borrower. When an investor borrows (employs leverage) to make an investment, the loan increases the potential variation of yields on the equity portion of the investment. If the investment rises in value and the investor re-pays the loan, the resulting return on equity is enhanced. On the other hand, if the investment were to fall in value and then the investment is sold to repay the loan, the resulting loss on equity is exaggerated. In other words, leverage can be a two edged sword, it can work either for or against the investor.

## **Crunching the Numbers: The Lender's Tools**

All lenders are concerned with a debtor's ability to re-pay the loan. The ability to re-pay any loan depends upon a number of factors including existing debt obligations and current uncommitted cash flow.

- Debt burden or debt service measures the percentage of income spent servicing debt. Debt burden equals total debt divided by income.
- Gross debt service ratio (GDSR) calculates the percentage of gross annual income that a borrower spends on basic housing costs. Homeowner mortgage payments, property taxes, annual heating costs, and 50% of condominium fees are divided by gross annual income. As a rule of thumb, GDSR should not exceed the range of 30% to 32% of gross annual income.
- Total debt service ratio (TDSR) calculates the percentage of gross annual income that a borrower spends servicing their total debt. TDSR includes housing costs mentioned above plus all other debt payments. A creditor will normally factor in an allowance for any available, even though unused, pre-existing credit facility. As a rule of thumb, total debt should not exceed 40% of gross annual income.
- Debt to asset ratio or the debt ratio is a measure of creditor protection. The debt ratio is calculated as total debt divided by total assets. The reciprocal of the debt ratio i.e. total assets divided by total debt is called asset coverage.
- Liquidity describes the ability to meet debt service, and other fixed payments in the short term.
- The current ratio measures the ability to meet short-term obligations with short-term assets. The current ratio equals total current assets divided by total current liabilities and is a very important liquidity measure.

- Working capital measures excess liquidity. Working capital equals total current assets minus total current liabilities. Excess liquidity may be viewed negatively because it indicates that there are idle funds that could be more productively allocated to other areas earning higher rates of return on the investment.
- Solvency describes two different measures of financial strength:
  1. The ability to pay debts as they come due, and
  2. The excess of assets over liabilities, and therefore a positive value for net worth.

### **Tips for Dealing Effectively with Lenders**

- It is important to remember that being granted **credit is not a right, it must be earned!**
- Go prepared to the interview.
- Be realistic. Know how much will be required, why, and when it is needed.
- Ask questions of the lender. Ensure that all covenants and conditions of the loan are understood.
- Be honest. Never surprise the lender.
- Be positive.
- Be prepared to offer security or collateral.
- Understand the risk components. Creditors will always seek to minimize risk.
- Negotiate effectively. Know beforehand the amount of debt that can be supported by affordable, regular, monthly payments; and approximately, how large a monthly payment can be afforded.

### **Debt Management Strategies**

- Financial advisors recommend that borrowers use credit wisely. Read the fine print located in the credit documents carefully and be certain to understand how the interest rates are calculated.
- Pre-arrange credit facilities before they are needed through prudent wealth management. This ensures that the most favourable interest rates will be available when needed.
- Credit is not a right, and it must be controlled and deployed efficiently in order to maximize wealth.
- Avoid unnecessary service charges and any hidden fees, which increase the effective interest rate.
- Reduce non-deductible debt. The Income Tax Act restricts the deductibility of certain interest charges.

- Pay off highest interest rate debt first. The contract fine print contains detail on the method used for interest rate calculations and the rates to be charged.
- Reposition assets. Sell non-productive assets. Re-structure portfolios to maximize after-tax efficiency. Careful restructuring might allow what previously had been non-deductible debt interest payments into a deductible interest expense for income tax purposes.
- Match borrowing term to purpose. Finance long-term investments and pay current consumption from cash flow.
- Negotiate a repayment plan with creditors.
- Consolidate high interest rate revolving debts (credit cards) to a lower rate loan with a single fixed re-payment schedule to provide for manageable cashflows. Any additional free cash flow generated by this strategy should be used to further reduce the debt's amortization period.

## Wealth Management Client Evaluation Forms

<b><u>DOCUMENT CHECKLIST</u></b>			
<b>PERSONAL DOCUMENTS</b>		<b>BUSINESS DOCUMENTS</b>	
	Tax returns (indicate fiscal years)		Tax returns (indicate fiscal years)
	Wills (client and spouse)		Financial statements (indicate fiscal years)
	Trusts		Deferred compensation plan
	Financial statements		Group RRSPs/RRIFs
	Personal/family budgets		Registered Pension Plan (RPP)
	Sale/purchase contracts		Pension or profit-sharing plan
	Life insurance policies		Insurance policies
	Disability insurance policies		Stock option purchase agreement
	Health insurance policies		Buy-sell agreements
	Other insurance policies (specify)		Employment agreement
	Current insurance offers		Employee benefits booklet
	Current investment offers		Articles of incorporation
	Deeds, mortgages, land contracts		Merger/acquisition agreement
	Leases (as lessor or lessee)		Partnership agreement
	Power of attorney/appointment		Company patents
	Separations / divorce / pre-nuptial agreement(s)		Equipment leasing agreement(s)
	Patents / copyrights / royalties		Building leases
	Employee benefit statement		Other (specify)
	Registered Retirement Savings Plan (RRSPs)		
	Brokerage and mutual fund statements		
	Other (specify)		

## **BUSINESS INTERESTS**

Full legal name		Phone	
Address			
Business now operates as	proprietorship	partnership	corporation
When does the fiscal year end?			
What accounting method is used?			
In what year did the business begin operations?			
If it began other than as a corporation, what is the date of incorporation?____ Jurisdiction of incorporation?			
Classes of shares	No. of authorized shares	No. of outstanding shares	
What is your function in the business?			
Do you have an employment contract?			
Do you have a buy-sell agreement?			

## **PRESENT OWNERS**

	Corporation		Partnership
(A) Client	_____ %common	_____ %preferred	_____ %_____
(B) _____	_____ %common	_____ %preferred	_____ %_____
© _____	_____ %common	_____ %preferred	_____ %_____
(D) _____	_____ %common	_____ %preferred	_____ %_____
(E) _____	_____ %common	_____ %preferred	_____ %_____

## VALUATION OF BUSINESS INTEREST

Estimate the lowest price for which the entire business might be sold as a going concern today.			
What is the lowest price you would accept for your interest today?			
If you were not an owner, estimate of the highest price you would pay today for the entire business as a going concern?			
What is the highest price you would pay to buy the interest of your co-owners today?			
Has an impartial valuation of the business been made?	Yes	No	If yes, when?
What valuation method was used?	What value was established?		
What are prospects for growth, sale, merger or going public?			

<b><u>WILL REVIEW CHECKLIST</u></b>		
	Yes	No
Is the will current for:		
<ul style="list-style-type: none"> <li>• province of residence?</li> </ul>		
<ul style="list-style-type: none"> <li>• tax law changes?</li> </ul>		
<ul style="list-style-type: none"> <li>• executor suitability?</li> </ul>		
<ul style="list-style-type: none"> <li>• guardian suitability?</li> </ul>		
<ul style="list-style-type: none"> <li>• birth or death of an heir?</li> </ul>		
<ul style="list-style-type: none"> <li>• separation or divorce?</li> </ul>		
<ul style="list-style-type: none"> <li>• common disaster?</li> </ul>		
Does the will identify the sources from which debts, funeral expenses, and estate administrative costs will be paid?		
Does the will identify the sources from which taxes will be paid?		
Are there bequests to charity either outright or in trust?		
Does the will call for the disposition of a closely-held business according to the client's wishes?		
If a non-corporate executor is named, is there a provision for a co-executor?		



Do any potential conflicts of interest exist between the named executor and the beneficiaries under the will?		
Is the individual or institution named as executor competent to carry out the duties of administering the estate?		
Does the will name an alternate or successor executor?		
Has the executor's bond requirement, if applicable, been waived in the will?		
Are specific powers granted to the executor in order to:		
<ul style="list-style-type: none"> <li>retain or sell property?</li> </ul>		
<ul style="list-style-type: none"> <li>invest trust and estate assets?</li> </ul>		
<ul style="list-style-type: none"> <li>exercise stock options?</li> </ul>		
<ul style="list-style-type: none"> <li>manage assets</li> </ul>		
<ul style="list-style-type: none"> <li>allocate receipts and disbursements to income and principal?</li> </ul>		
<ul style="list-style-type: none"> <li>make loans and borrow funds?</li> </ul>		
<ul style="list-style-type: none"> <li>settle claims?</li> </ul>		
<ul style="list-style-type: none"> <li>make decisions relating to the deceased's business interests?</li> </ul>		
<ul style="list-style-type: none"> <li>distribute property in specie?</li> </ul>		
<ul style="list-style-type: none"> <li>perform other appropriate duties?</li> </ul>		

Does the will provide for disposition of property if an heir predeceases the client?		
Does the will state who will receive property if the beneficiary disclaims it?		
Is the ownership of the assets complementary to the provisions of the will, i.e., some assets may pass outside the will by contract or by type of ownership.		
Is the custody of minors satisfactorily addressed?		
Does the will specify that any minor beneficiary's share of the estate will be held until he or she reaches a more mature age?		
Does the will provide for a guardianship or trust to protect the inheritance of disabled or incompetent beneficiaries?		
Does the will give the executor the authority to make income tax elections at his or her discretion?		
If there is a spousal trust? Does it comply with the spousal trust rules?		

### CURRENT INCOME

	Current	Projections for Subsequent Years		
<b>Cash Receipts:</b>	19____	19____	19____	19____
<b>NET SALARY AND BONUS</b>	\$	\$	\$	\$
Client				
Spouse				
<b>NET BUSINESS INCOME</b>				
Client				
Spouse				

<b>OTHER EARNED INCOME</b>				
Client				
Spouse				
<b>NET PENSION INCOME</b>				
Client				
Spouse				
<b>NET INTEREST INCOME</b>				
<b>NET DIVIDEND INCOME</b>				
<b>NET CASH FLOW FROM RENT AND ROYALTY INCOME</b> [real estate, oil and gas]				
<b>OTHER CASH RECEIPTS</b>				
Sale of Assets				
Alimony and Child Support				
Trust Distributions				
<b>MISCELLANEOUS</b>				
<b>TOTAL CASH RECEIPTS</b>	\$	\$	\$	\$

## CURRENT CASH EXPENDITURES

	Current	Projections for Subsequent Years		
	19____	19____	19____	19____
<b>DEDUCTIONS FROM PAY</b>				
CPP/QPP				
EI Contribution				
Federal and Provincial Income Taxes				
Company Pension				
Group Benefits				
Other				
Subtotal	\$	\$	\$	\$
<b>HOUSING</b>				
Mortgage Payment or Rent				
Utilities				
Housing Maintenance				
Homeowners' Insurance				
Property Taxes				
Home Furnishings				
Subtotal	\$	\$	\$	\$
<b>FOOD AND HOUSEHOLD</b>				
Groceries				

Household Supplies				
Subtotal	\$	\$	\$	\$
<b>CLOTHING</b>				
Clothing Purchases				
Cleaning				
Subtotal	\$	\$	\$	\$
<b>TRANSPORTATION</b>				
Automobile Payments				
Automobile Insurance				
Fuel, Repairs and Parking				
Public Transit				
Subtotal	\$	\$	\$	\$
<b>INSURANCE</b>				
Life Insurance				
Disability Insurance				
Medical/Dental Insurance				
Property/Liability Insurance				
Subtotal	\$	\$	\$	\$
<b>ENTERTAINMENT AND RECREATION</b>				
Vacation and Travel				
Vacation Home				
Meals and Other Entertainment				

Clubs and Other Recreation				
Subtotal	\$	\$	\$	\$
<b>CONTRIBUTIONS AND CHARITIES</b>				
Subtotal	\$	\$	\$	\$
<b>DEBT REPAYMENT</b>				
Credit Cards				
Installment Debt				
Other Debt Repayment				
Subtotal	\$	\$	\$	\$
<b>MISCELLANEOUS EXPENSES</b>				
Education Expenses				
Domestic Help/ Day Care				
Alimony and Child Support				
Business and Professional Expenses				
Business Insurance				
Miscellaneous				
Subtotal	\$	\$	\$	\$
<b>TOTAL EXPENDITURES</b>	\$	\$	\$	\$

### LIFE INSURANCE POLICY SUMMARY

	Policy 1	Policy 2	Policy 3	Policy 4	Policy 5
Owner					
Policy Number					
Issue Age					
Insurance Company					
Beneficiary					
Type of Policy					
a. Face Value	\$	\$	\$	\$	\$
b. Accumulated Dividends	\$	\$	\$	\$	\$
c. Cash Surrender Value (CSV)	\$	\$	\$	\$	\$
d. Policy Loans Outstanding plus interest	\$	\$	\$	\$	\$
e. Net Coverage	\$	\$	\$	\$	\$
f. Net Cash Value	\$	\$	\$	\$	\$
g. Approx. Annual Dividend	\$	\$	\$	\$	\$
h. Approx. Annual CSV Increase	\$	\$	\$	\$	\$
i. Annual Premium	\$	\$	\$	\$	\$
j. Net Cost of Insurance	\$	\$	\$	\$	\$

## **BUSINESS INSURANCE SUMMARY**

Professional/Business Insurance	Liability	Policy 1	Policy 2	Policy 3	Policy 4
Policy Number					
Insurance Company					
Expiration Date of Policy					
Liability Limits					
Prerequisite Liability Coverage					
Person(s) covered:					
Spouse					
Other (name)					
Other Insurance		Policy 1	Policy 2	Policy 3	Policy 4
Type of Policy					
Policy Number					
Insurance Company					
Expiration Date of Policy					
Property Covered					
Limits					
Annual Premium		\$	\$	\$	\$



## ESTATE TAX ESTIMATE SUMMARY

<b>CAPITAL PROPERTY</b>	Fair Market Value	Adjusted Cost Base	Net Gain or Loss
Qualified Small Business Corporation Shares	\$	\$	\$
Qualified or Exempt Property			
Other Securities, Mutual Funds, Properties, or Shares			
Real Estate and Depreciable Property			
Bonds, Debentures, Promissory Notes and Other Properties			
Personal Use Properties			
Listed Personal Property			
Total Net Gain on Deemed Dispositions			
Taxable Portion (**%)			

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# Financial Calculations And Decision Making Tools

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## Financial Decision-Making

The goal of wealth management is to increase and maximize investable net worth through the effective manipulation of money and credit.

An investor's ability to maximize investable net worth is greatly aided by the ability to choose amongst competing investment options. Various formulas and tools can be used by investors to determine the extant value or the past performance of their investments.

## Analytical Tools

Depending on the type of investment that is owned or under consideration by an investor, various tools may be used to measure and evaluate the return or value of that investment.

Much of wealth management requires answers to mathematical questions that involve the time value of money. Time value of money (TVM) represents the trade-off between the present use and the future gain of money. Time value of money moves all money flows either back to the present or out to a common future date. It measures the costs and benefits of investment alternatives that occur in different time periods. The most common example is when an investor gives money to someone else, who subsequently puts it to work, and then pays the investor interest in return for the use of the investor's money. This interest is compensation for the temporary loss to the investor of the use of the money invested.

Although it is possible to compute all time value of money problems mathematically using formulae or by the use of compound interest tables, computers and financial calculators add simplicity and efficiency to these computations.

Compound interest is interest earned on both principal and interest. Interest is compounded when it is computed, added to the principal amount, and reinvested. The process of calculating the future sum or value (FV) of an investment is called compounding.

The process of calculating the present value (PV) of a future sum is called discounting.

Compounding and discounting are reciprocals of one another. This means they are inverse mathematical functions of one another.

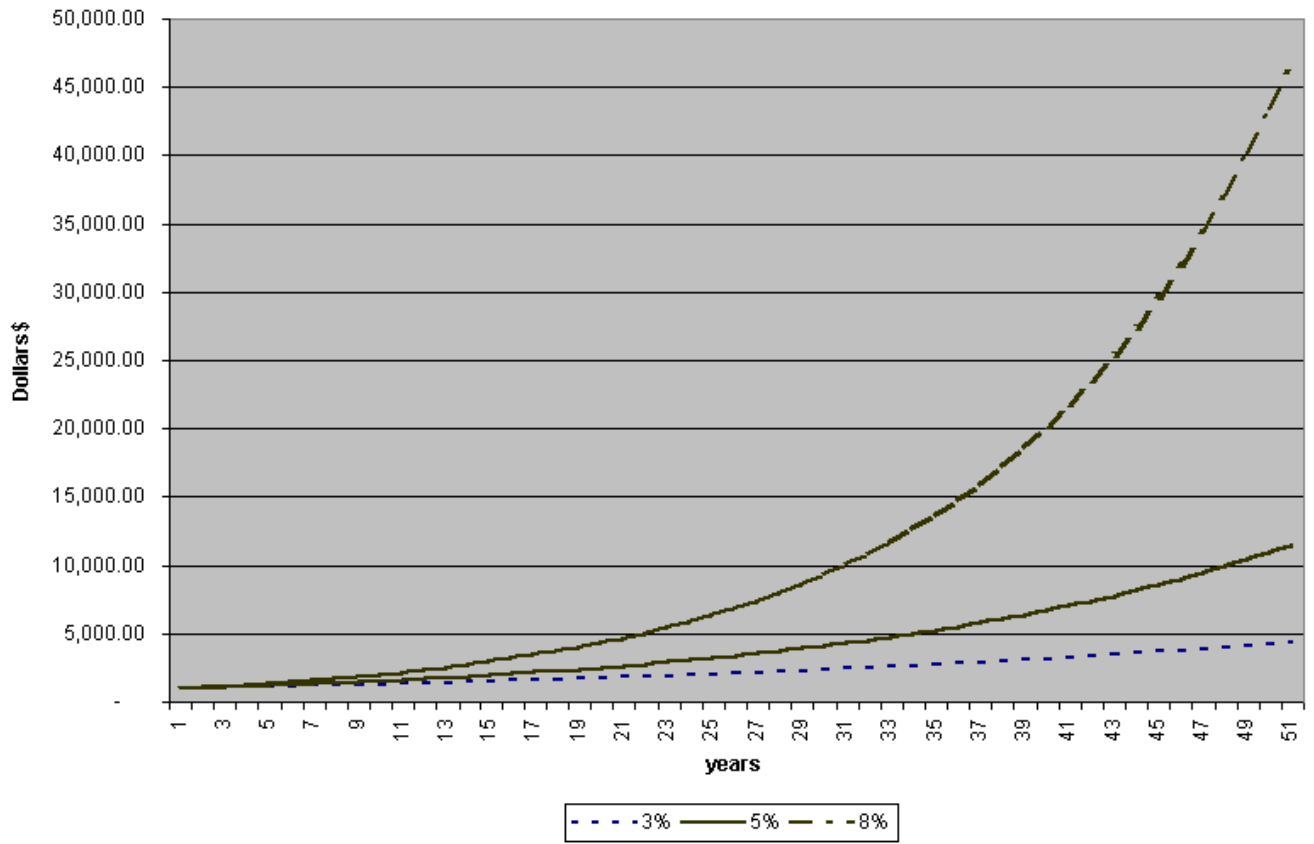
An annuity is defined as a series of payments or receipts of a fixed dollar amount, for a specified number of time periods.

An ordinary annuity assumes that these payments or receipts occur at the end of the period. Conversely, an annuity due assumes that the payments or receipts occur at the beginning of the period. In finance, the usual assumption or norm is the use of an ordinary annuity i.e. payments or receipts occurring at the end of the period. The use of an annuity due is signaled via key words such as..." starting today", "immediately", "starting now" or words to a similar effect.

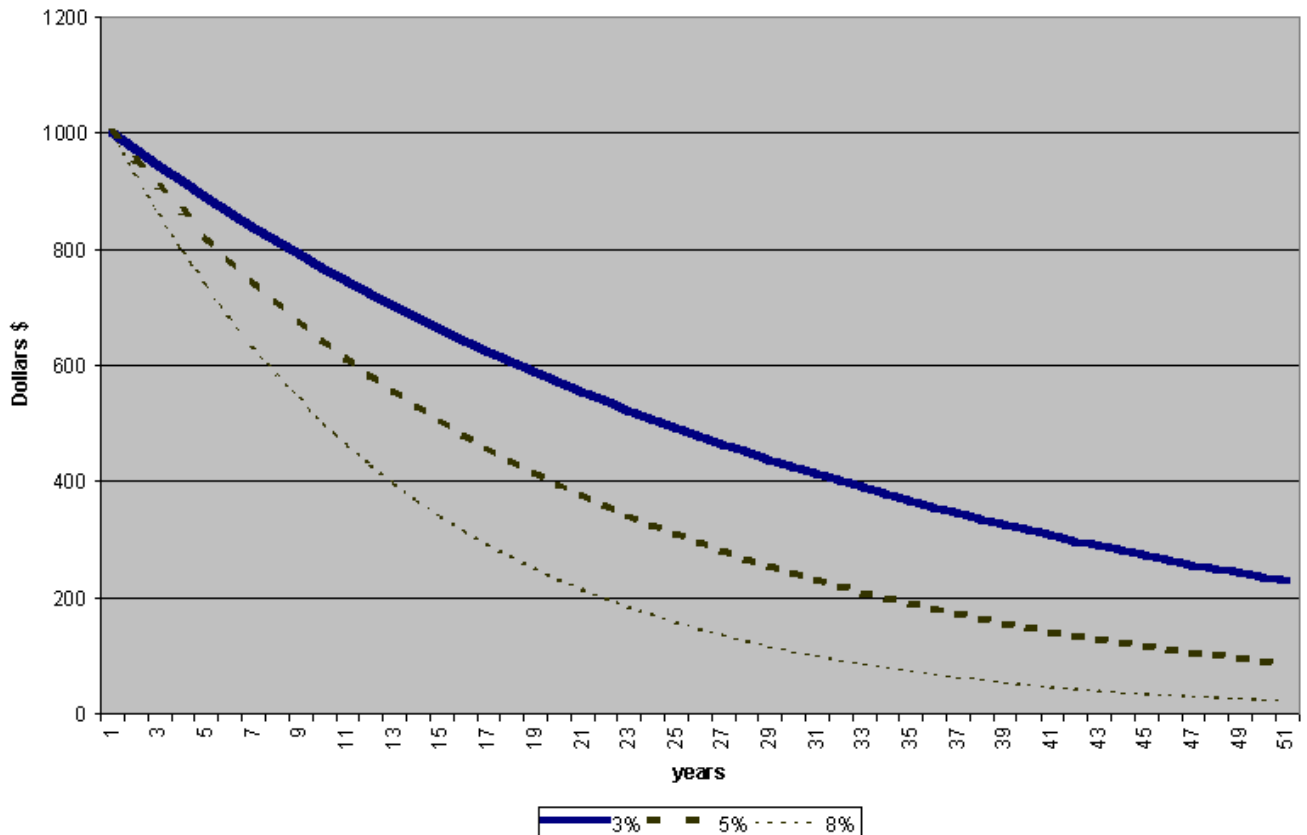
A perpetuity is a special type of an annuity that has no maturity date. An example of a perpetuity is a preferred share that pays a fixed and stated dividend amount forever.

Capital budgeting is different from cash flow budgeting and provides additional analytical benefits to an investor. Capital budgeting is the process, which is commonly employed in corporate finance, of allocating capital to investments whose benefits will be spread over several time periods. Typically, an investor is faced with more potential investment choices than can be successfully undertaken because of the lack of funds. Capital rationing therefore must occur when there is an upper limit or maximum amount placed on the ability to invest or with which to make capital expenditures. The investor requires some sound and logical methods by which to rank potential investments in order to make reasonable capital rationing decisions.

**Compound Value of \$1000**



Discounted Value of \$1000



Capital budgeting evaluates an investment’s incremental cash flows and evaluates these cash flows relative to an investment’s cost. Capital budgeting uses cash flows rather than profits because the cash flows better reflect the timing of both the costs and benefits of an investment decision. Specifically, only the incremental after-tax cash flows are used when determining whether to undertake a particular investment.

Net present value (NPV) is a method used in evaluating and ranking investments, whereby the net present value of all cash outflows (such as the cost of the investment) and cash inflows (such as the investment’s return) are calculated using a given discount or hurdle rate. An investment is considered acceptable if the NPV is positive. NPV is used to rank different investment options, from the highest NPV to the lowest NPV. An investment is rejected if the NPV is negative since this indicates that the investment does not improve the investor’s current net worth.

Internal rate of return (IRR) is the discount or hurdle rate at which the present value (PV) of all of the future cash flows of an investment exactly equal the total cost of the investment. The IRR is a special case of the net present value calculation because the IRR is the rate of return at which the NPV of an investment equals zero.

An investor should compute both the NPV and the IRR for each potential investment in order to verify, or in order to provide additional insights into, the merits of a particular investment choice. Without the use of a computer or financial calculator the calculation of the IRR is done by a process known as iteration, which can be extremely time-consuming and frustrating.

IRR ranks various investments differently than NPV if:

- 1) Two projects have different initial investments, and when
- 2) The timing of the cash flows from the investments is different.

Capitalization (Cap) rate can be referred to as the capitalization rate of an asset. The Cap rate is the interest rate used to convert a series of future payments into a single present value (PV) and is most commonly used in valuing real estate.

Payback period is the length of time required to recover an initial investment. The payback period is calculated as the original investment divided by annual cash flow. It can also be referred to as a cash recovery period.

Dividend discount model (DDM) is a valuation technique used for estimating the intrinsic value of a stock. DDM models calculate the discounted present value of all future dividends or future earnings. DDMs describe the relationship between a stock's current price and the present value of all future dividend payments or earnings. This model can be used to determine the value of a common stock.

## The Gordon Growth Model (also known as the Constant Growth DDM)

$$\text{Value of a common stock} = P_0 = \frac{D_1}{(k_s - g)} = \frac{D_0(1 + g)}{(k_s - g)}$$

where

$P_0$  = current market stock price

$D_0$  = current dividend just paid

$D_1$  = dividend paid 1 year from now

$k_s$  = required rate of return on a stock investment

$g$  = long term sustainable growth rate of the stock

Return on equity (ROE) is the after-tax profit earned by a company compared to the total cost of its equity shares.

Return on assets (ROA) is the after-tax profit compared to the firms total tangible assets.

Return on investment (ROI) or return on invested capital can be defined as the after-tax profit earned by a corporation compared to the firms total invested capital. Total invested capital includes common and preferred equity plus all funded debt.

### Keeping Score: Types of Returns

Investment returns are the rewards for investing. Return includes both realized current income (interest, dividends, rent, realized capital gains or losses) and any unrealized capital appreciation or depreciation.

#### ***Types of return include:***

- *Nominal return.* The named or stated rate of return.
- *Real return.* Adjusts the nominal return for the effect of inflation, and it is estimated as the rate of return minus the rate of inflation equals real rate of return.

- *Effective annual rate (EAR)*. The effective annual rate adjusts the nominal interest rate for the effects of compounding, when interest is compounded more often than annually.
- *Risk-free return* is the return on a risk-free asset that is earned with perfect certainty. This hypothetical return is usually proxied by federal government securities that have the same term to maturity as the investor's time horizon. For example, an investor with a five-year time horizon would choose a five-year government of bond as the risk-free benchmark.
- *After-tax real rate of return*. Adjusts the nominal rate of return for the effects of inflation and income taxes and it is estimated as the nominal return less income taxes and the effects of inflation.
- *Holding period return (HPR)*. The difference in value of an asset (current income plus or minus capital change) that occurs from the time that the asset is acquired until some future subsequent time, usually when the asset is disposed of.
- *Realized vs. non-realized gains/losses*. A realized gain on an asset is one that is actually taken and the investor has cash in hand. An example of a realized gain is when a rental property purchased for \$200,000 is sold for \$250,000, thus realizing a \$50,000 gain. An unrealized gain on the other hand, is merely a paper profit and might be lost if the asset's value declines. No funds are exchanged and no sale is completed in the case of an unrealized gain.

## What is Value?

Value has a number of meanings and will be defined and used differently by various financial advisors. Value can be stated as the book value. Book value is an accounting term, which employs historic cost as opposed to the current cost of an asset. Book value is typically the value shown on the balance sheet of a company.

Current fair market value (FMV) is the observed value of an asset as it trades in the marketplace or the appraised value.

Liquidation value is the value that an asset would bring if it were to be sold.

Intrinsic value is the present value of all future cash flows.

Although there are many types of value definitions, in general, the value of an asset is determined by three factors:

1. The amount and timing of expected future cash inflows,
2. The riskiness of these future cash flows, and
3. The investor's required rate of return.



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## Glossary

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**Annual percentage rate (APR).** An annualized interest rate that ignores the effects of compounding. It is calculated by multiplying the periodic interest rate by the number of periods in a year. Bond yields are typically calculated by this method.

**Book value per common share.** Assuming no preferred shares outstanding, the book value per common share is calculated as the total assets minus total liabilities divided by the average number of common shares outstanding.

**Capital cost allowance (CCA).** The amount an owner of an income producing asset is allowed to deduct for income tax purposes as a result of owning a depreciable asset. CCA is a tax shield that allows an investor to deduct the cost of depreciating capital assets from income. Under the Income Tax Act, Customs and Revenue Agency (CCRA) regards this as a necessary expense for producing income. Investors calculate CCA so that it allows a recovery over time, of the original amount invested. Generally, investors may claim only 50% of the allowable CCA expense in the year of acquisition.

**Capitalization or capital structure.** Total dollar amounts of all permanent sources of financing. Calculated as the total of all negotiated debt, preferred and common stock, contributed surplus and retained earnings of the company.

**Capitalization method.** A method of appraising real estate. Calculated as net operating income (NOI) divided by the property's current fair market value (FMV).

**Cash flow.** One measure of a company's financial status. Cash flow can be calculated directly or indirectly. One technique of reconstructing a cash flow statement calculates cash flow as net income for a period plus any non-cash deductions, such as depreciation, amortization, depletion, deferred income taxes, and minority interest.

**Depreciation.** Depreciation is an accounting expense that allows for the deduction of the initial cost of an asset over subsequent periods. The amount by which the value of improvements has decreased over time, because of wear and tear. The periodic costs of owning depreciable assets (such as buildings and equipment) that are subject to deterioration. No depreciation expense can be taken on land.

**Dilution.** The reduction of earnings per common share assuming all convertible securities are converted to common shares.

**Fair market value (FMV).** The current market price at which an asset passes from a willing seller to an interested buyer.

**Fixed asset.** A balance sheet item. Tangible, long-term assets that are held for use by the business and used to earn revenue. Examples are real estate or equipment.

**Effective annual interest rate (EAR).** The interest rate as if it were compounded only once per year. The periodic interest rate times the number of compound periods in the year equals the effective annual rate (EAR). The EAR is the actual interest rate earned/paid after adjusting the nominal or stated interest rate for the frequency of compounding employed.

**Effective interest rate.** The periodic interest rate considering both the frequency of compounding and the nominal rate of interest.

**Equity or Shareholders' Equity or Stockholders Equity.** The residual ownership interest of common and preferred shareholders. It is calculated using total assets minus total liabilities of a company. Also referred to as net worth.

**Income method or investment method.** An appraisal method typically used for valuing rental real estate. This valuation tool converts the net income stream produced by the property into a market value by using a capitalization rate.

**Inflation risk** is the likelihood that the real return of the fixed-income investment will be less than the nominal (dollar) return. Inflation risk is referred to as the risk of unanticipated increases in future inflation.

**Intangible asset.** An asset with no physical form, e.g., goodwill.

**Intrinsic value.** The real and true value of a security. This value can be different from the market price, and it can be different from the accounting book value.

**Iteration.** A mathematical process in which a series of operations is repeated until an answer is derived. It is a method of approximating and deriving an answer by repeatedly re-computing until a solution is arrived at.

**Leverage.** The use of debt to finance the purchase and ownership of investments. The use of debt magnifies the potential variations of yields on the equity portion of the investment.

**Net operating income (NOI).** Gross revenue minus vacancy allowance, bad debt allowance, and total operating expenses. NOI is calculated excluding income tax, mortgage payments, and depreciation expense.

**Opportunity cost.** The earnings potential of an investment that is passed up in favor of current consumption or by choosing an alternate investment.

**Physical depreciation.** The loss in value of a depreciable asset due to wear and tear.

**Preferred stock.** The nonvoting class of share capital that is entitled to a dividend payment before the company pays dividends to the common shareholders. Preferred stock also has preference over the common shareholders with respect to claims on the company's assets in the case of liquidation.

**Straight-line depreciation method.** One of the allowable methods used to calculate depreciation expense for accounting purposes. The annual depreciation expense is calculated as purchase price minus expected salvage value divided by the economic lifetime.

**Real interest rate.** The nominal rate of interest minus the inflation rate, where the inflation rate is defined as the percentage change in the Consumer Price Index (CPI).

**Rule of 72.** Approximates a compound growth rate investor would require in order to double the original investment. 72 divided by the interest rate equals the time required for this doubling of capital to occur.

**Treasury shares.** Common stocks that the company has repurchased in the marketplace are called treasury stock. In addition, treasury shares consist of those shares that are authorized for sale by the company but that are not yet issued.

**Valuation.** The determination or calculation of the worth, at a specified date or time, of an asset or investment.

## Questions

### **1) How can a capitalization rate (Cap rate) be used by an investor?**

The capitalization (Cap rate) rate is typically used when evaluating and analyzing real estate investments. The Cap rate is calculated by dividing net operating income (NOI) by the property's current fair market value (FMV). Alternatively, this formula can also be rearranged algebraically, and can be used to calculate the maximum amount that an investor would be prepared to pay for a piece of real estate, when the Cap rate is known.

### **2) Why should an investor use mathematical tools when investing?**

Many individuals are frightened by the thought of having to perform mathematical calculations no doubt dredging up distasteful memories of high school algebra classes. However, with the use of technology in the form of hand-held calculators and computer programs, this anxiety and stress is unnecessary. We have included several Websites in this book that we have found particularly useful in aiding students and investors to overcome the dread of mathematics. The mathematical tools are important to an

investor in several respects. The use of mathematics is necessary and helpful when an investor is setting goals and determining the realism of these objectives. Mathematics is used to determine the amount that is required to be saved on a regular basis in order for an investor to achieve the type of retirement desired. The knowledge of mathematics also allows the investor to formulate “what if” scenarios. For example, the investor may wish to know how long their retirement nest egg will last, given a certain level of consumption in retirement, or the interest rate that is required to achieve their retirement objectives. The investor may wish to investigate the effects of different interest rates on their required savings or on their level of consumption during retirement. Employing modern portfolio theory, since risk and reward are related, it stands to reason that if an investor requires an interest rate of 20%, to reach their retirement goals, then an investor will obviously have to consider their risk tolerance in their choice of investment compared with an individual who requires a 5% return in order to achieve the same level of consumption during retirement.

Many companies provide investors with excellent mathematical tools. However, the investor must bear in mind that these companies are not altruistic and that they have other motives, which may not be precisely identical to objectives of the investor. If the investor is unaware of the method used in a computation, then the investor must rely on the assumptions and methods of the other party. Basic mathematics skills allow the investor to make their own decisions and use their own assumptions in order to arrive at individual answers to their own questions. No one has a greater stake in an individual’s retirement plan than the individual himself or herself. In other words, the best defense is a good offense!

**3) A term deposit pays 5% interest. What is the nominal rate?**

The nominal rate is a named or stated rate. In this case, the nominal rate is 5%.

**4) If a customer it is charged 2.75% interest rate, compounded monthly, on a department store credit card, how much is the annual interest rate?**

An individual who does not understand the time value of money would simply calculate that the annual interest rate is  $12 \times (0.0275)$  which equals 33%. This is known as the annual percentage rate (APR), and although it is commonly used, it does not take compounding into account. In order to calculate the annual interest rate that is actually charged the investor must use the effective annual rate (EAR), which accounts for both the frequency of compounding and the nominal rate. The effective annual rate is calculated as:  $EAR = (1 + 0.0275)^{12} - 1 = (1.0275)^{12} - 1$

which equals 38.48% annually, a significant difference!

*The following questions can be answered using a financial calculator*

where the necessary keystrokes on the calculator are as follows:

n = number of compounding periods

i = interest rate per compounding period

pmt = periodic payment

PV = present value

FV = future value

NPV = net present value

CFo, CFi, CF2, CF3 = cash flow function keys

IRR = internal rate of return

**5) An investor is putting \$2,000 per year into a mutual fund that averages a return of 9% per year. How many years will these payments have to be made before the fund will be worth \$100,000 (rounded to the nearest whole number of years)?**

i = 9%, pmt = (\$2,000), FV = \$100,000 Compute n.

n = 20 years (rounded up to the nearest whole number)

**6) The common stock of XYZ is currently selling in the market for \$36.67. XYZ has just paid its annual dividend \$2.00, and the dividend is expected to grow at 10% per year indefinitely. What rate of return can an investor expect to earn on this investment in XYZ stock?**

This question can be answered by algebraically manipulating the formula for the constant growth dividend discount model, and solving for k.

$$P_0 = \frac{D_1}{(k_s - g)}$$

$$k_s = \frac{D_1}{P_0} + g = \frac{D_0(1 + g)}{P_0} + g = \frac{\$2.00(1.10)}{\$36.67} + 0.10 = \frac{\$2.20}{\$36.67} + 0.10 = .15999$$

Therefore, an investor in the stock of XYZ can expect to earn a 16% rate of return.

**7) An insurance salesperson offers an annuity contract that will pay \$100,000 after 20 years if the annuitant pays \$2,000 per year with the first payment due immediately. What rate of return is being offered?**

Note: this question requires the use of an annuity due in the calculation! Be sure to switch calculator to Begin mode.

$n = 20$  years,  $pmt = (\$2,000)$  per year,  $FV = \$100,000$ , Compute  $i$ .

$i = 8.10\%$

**8) Find the Net Present Value (NPV) of the following cash flow schedule using a 10% discount rate:**

<u>Year</u>	<u>Cash Flow</u>
0	\$(3,000)
1	(5,000)
2	2,000
3	4,000
4	6,000
5	(1,000)

This question uses the net present value function of the financial calculator.

$CF_0 = (\$3,000)$ ,  $CF_1 = (\$5,000)$ ,  $CF_2 = \$2,000$ ,  $CF_3 = \$4,000$ ,  $CF_4 = \$6,000$ ,  $CF_5 = (\$1,000)$ ,

$i = 10\%$ , Compute NPV.

NPV = \$589.86

**9) Calculate the internal rate of return (IRR) of a \$10,000 investment that is expected to produce the following cash flows:**

**Year Cash Flow**

**2 \$7,000**

**3 6,000**

**4 3,000**

This question uses the internal rate of return (IRR) functions of the financial calculator.

$CF_0 = (\$10,000)$ ,  $CF_1 = 0$ ,  $CF_2 = \$7,000$ ,  $CF_3 = \$6,000$ ,  $CF_4 = \$3,000$ , Compute IRR.

IRR = 19.00%

NOTE! Be sure that the first cash flow ( $CF_1$ ) is entered as a 0 value.

**10) The earnings of the ABC Company are currently \$2.00 per share. If the earnings per share grow over the next five years at an annual growth rate of 10%, how much will they be at the end of that time?**

$n = 5$  years,  $i = 10\%$ ,  $PV = \$2.00$ , Compute FV.

FV = \$3.22

**11) A stock is expected to pay an annual dividend of \$0, \$2, and \$4 per share at the end of each of the next three years, respectively. At the end of the third year, the stock is expected to sell for \$80 per share. If the stock is currently selling at \$50 per share, what is the expected return on a three-year investment in this stock?**

This question can be solved using the internal rate of return functions of the financial calculator.

$CF_0 = (\$50)$ ,  $CF_1 = \$0$ ,  $CF_2 = \$2$ ,  $CF_3 = \$4 + \$80 = \$84$ , Compute IRR.

IRR = 20.00%

NOTE. The third cash flow includes the \$4 dividend plus the \$80 sale price of the stock. The first cash flow of zero dollars at the end of the first-year must be entered into the calculator.

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## Appendix

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### The Mathematics of Finance

#### Essential Symbols

**FV = future value**

**PV = present value**

**k = nominal interest rate**

**n = number years**

**pmt = periodic payment**

**m = number of compounding periods in year**

**i = periodic interest rate; interest rate per compound period**

**infl = annual rate of inflation**

**k<sub>real</sub> = real interest rate**

**EAR = effective annual interest rate**

**NPV = net present value**

**IRR = internal rate of return**

**CF<sub>0</sub> = initial cash flow**

**CF<sub>t</sub> = cash flow in period t**

**P<sub>0</sub> = current market price**

**D<sub>0</sub> = current cash dividends just paid**

**D<sub>t</sub> = dividend expected in year t**

**I<sub>t</sub> = interest earned in year t**

**M = par or maturity value of a bond**



**MTR = marginal tax rate**

**s = sample standard deviation**

**Future Value of \$1**

$$\boxed{FV = PV(1+k)^n}$$

**Present Value of \$1**

$$\boxed{PV = \frac{FV_n}{(1+k)^n}}$$

**Net Present Value (NPV)**

$$\boxed{NPV = \sum_{t=1}^n \frac{CF_t}{(1+k)^t} - CF_0}$$

**Internal Rate of Return (IRR)**

$$\boxed{\sum_{t=1}^n \frac{CF_t}{(1+IRR)^t} - CF_0 = 0}$$

**Present Value of an Annuity of \$1**

$$PV = PMT \times \left[ \frac{1 - \frac{1}{(1+k)^n}}{k} \right]$$

**Future Value of an Annuity of \$1**

$$FV = PMT \times \left[ \frac{(1+k)^n - 1}{k} \right]$$

**Future Value of \$1 with more Frequent than Annual Compounding**

$$FV_n = PV \left[ 1 + \left( \frac{k}{m} \right) \right]^{nm}$$

**Present Value of an Annuity Due of \$1**

$$PV = PMT \times \left[ \frac{1 - \frac{1}{(1+k)^n}}{k} \right] (1+k)$$

### Future Value of an Annuity Due of \$1

$$FV = PMT \times \left[ \frac{(1+k)^n - 1}{k} \right] (1+k)$$

### Effective Annual Compound Interest Rate

$$EAR = \left[ 1 + \frac{k_{\text{nominal}}}{m} \right]^m$$

### Annual Percentage Rate

$$APR = m \times i$$

### Real Rate of Return

$$(1 + k_{\text{real}}) = \frac{(1 + k_{\text{nominal}})}{(1 + \text{infl})}$$

### Capitalization Rate or Cap Rate

$$\text{CapRate} = \frac{\text{Net Operating Income}}{\text{Current Market Value}} = \frac{\text{NOI}}{\text{FMV}}$$

**Prof. George S. Mentz, JD, MBA, CWM™, MFP™, CAM, CPM,,** is the first person in the United States to achieve "Quad Designation Status" as a JD, MBA, licensed financial planner and wealth manager, and Certified Financial Consultant. Mr. Mentz is presently serving as President and Professor for The American Academy of Financial Management™. Mr. Mentz has consulted with Wall Street firms, trained hundreds of financial advisors, and instructed and presented strategies to several thousand clients on wealth management, financial planning, e-commerce, and estate planning. Prof. Mentz is a Licensed Attorney and Counselor of Law (LA), and has researched, published, and presented worldwide in multiple venues such as television, radio, journals, magazines, websites, national conferences and more. Prof. Mentz is presently an adjunct faculty member for several colleges, MBA programs, law schools, and universities teaching online and on-site. Prof. Mentz has recently been quoted in the Wall Street Journal, Financial Times Asia, El Norte Mexico, and the Hindu National.

## Supplemental on Financial Management, Economics and Global Trade

### Beginners' Guide to Financial Statements

#### The Basics

If you can read a nutrition label or a baseball box score, you can learn to read basic financial statements. If you can follow a recipe or apply for a loan, you can learn basic accounting. The basics aren't difficult and they aren't rocket science.

This brochure is designed to help you gain a basic understanding of how to read financial statements. Just as a CPR class teaches you how to perform the basics of cardiac pulmonary resuscitation, this brochure will explain how to read the basic parts of a financial statement. It will not train you to be an accountant (just as a CPR course will not make you a cardiac doctor), but it should give you the confidence to be able to look at a set of financial statements and make sense of them.

Let's begin by looking at what financial statements do.

“Show me the money!”

We all remember Cuba Gooding Jr.'s immortal line from the movie *Jerry Maguire*, “Show me the money!” Well, that's what financial statements do. They show you the money. They show you where a company's money came from, where it went, and where it is now.

There are four main financial statements. They are: (1) balance sheets; (2) income statements; (3) cash flow statements; and (4) statements of shareholders' equity. Balance sheets show what a company owns and what it owes at a fixed point in time. Income statements show how much money a company made and spent over a period of time. Cash flow statements show the exchange of money between a company and the outside world also over a period of time. The fourth financial statement, called a “statement of shareholders' equity,” shows changes in the interests of the company's shareholders over time.

Let's look at each of the first three financial statements in more detail.

## Balance Sheets

A balance sheet provides detailed information about a company's assets, liabilities and shareholders' equity.

Assets are things that a company owns that have value. This typically means they can either be sold or used by the company to make products or provide services that can be sold. Assets include physical property, such as plants, trucks, equipment and inventory. It also includes things that can't be touched but nevertheless exist and have value, such as trademarks and patents. And cash itself is an asset. So are investments a company makes.

Liabilities are amounts of money that a company owes to others. This can include all kinds of obligations, like money borrowed from a bank to launch a new product, rent for use of a building, money owed to suppliers for materials, payroll a company owes to its employees, environmental cleanup costs, or taxes owed to the government. Liabilities also include obligations to provide goods or services to customers in the future.

Shareholders' equity is sometimes called capital or net worth. It's the money that would be left if a company sold all of its assets and paid off all of its liabilities. This leftover money belongs to the shareholders, or the owners, of the company.

The following formula summarizes what a balance sheet shows:

$$\text{ASSETS} = \text{LIABILITIES} + \text{SHAREHOLDERS' EQUITY}$$

A company's assets have to equal, or "balance," the sum of its liabilities and shareholders' equity.

A company's balance sheet is set up like the basic accounting equation shown above. On the left side of the balance sheet, companies list their assets. On the right side, they list their liabilities and shareholders' equity. Sometimes balance sheets show assets at the top, followed by liabilities, with shareholders' equity at the bottom.

Assets are generally listed based on how quickly they will be converted into cash. Current assets are things a company expects to convert to cash within one year. A good example is inventory. Most companies expect to sell their inventory for cash within one year. Noncurrent assets are things a company does not expect to convert to cash within one year or that would take longer than one year to sell. Noncurrent assets include fixed assets. Fixed assets are those assets used to operate the business but that are not available for sale, such as trucks, office furniture and other property.

Liabilities are generally listed based on their due dates. Liabilities are said to be either current or long-term. Current liabilities are obligations a company expects to pay off within the year. Long-term liabilities are obligations due more than one year away.

Shareholders' equity is the amount owners invested in the company's stock plus or minus the company's earnings or losses since inception. Sometimes companies distribute earnings, instead of retaining them. These distributions are called dividends.

A balance sheet shows a snapshot of a company's assets, liabilities and shareholders' equity at the end of the reporting period. It does not show the flows into and out of the accounts during the period.

## Income Statements

An income statement is a report that shows how much revenue a company earned over a specific time period (usually for a year or some portion of a year). An income statement also shows the costs and expenses associated with earning that revenue. The literal "bottom line" of the statement usually shows the company's net earnings or losses. This tells you how much the company earned or lost over the period.

Income statements also report earnings per share (or "EPS"). This calculation tells you how much money shareholders would receive if the company decided to distribute all of the net earnings for the period. (Companies almost never distribute all of their earnings. Usually they reinvest them in the business.)

To understand how income statements are set up, think of them as a set of stairs. You start at the top with the total amount of sales made during the accounting period. Then you go down, one step at a time. At each step, you make a deduction for certain costs or other operating expenses associated with earning the revenue. At the bottom of the stairs, after deducting all of the expenses, you learn how much the company actually earned or lost during the accounting period. People often call this "the bottom line."

At the top of the income statement is the total amount of money brought in from sales of products or services. This top line is often referred to as gross revenues or sales. It's called "gross" because expenses have not been deducted from it yet. So the number is "gross" or unrefined.

The next line is money the company doesn't expect to collect on certain sales. This could be due, for example, to sales discounts or merchandise returns.

When you subtract the returns and allowances from the gross revenues, you arrive at the company's net revenues. It's called "net" because, if you can imagine a net, these revenues are left in the net after the deductions for returns and allowances have come out.

Moving down the stairs from the net revenue line, there are several lines that represent various kinds of operating expenses. Although these lines can be reported in various orders, the next line after net revenues typically shows the costs of the sales. This number tells you the amount of money the company spent to produce the goods or services it sold during the accounting period.

The next line subtracts the costs of sales from the net revenues to arrive at a subtotal called "gross profit" or sometimes "gross margin." It's considered "gross" because there are certain expenses that haven't been deducted from it yet.

The next section deals with operating expenses. These are expenses that go toward supporting a company's operations for a given period – for example, salaries of administrative personnel and costs of researching new products. Marketing expenses are another example. Operating expenses are different from "costs of sales," which were deducted above, because operating expenses cannot be linked directly to the production of the products or services being sold.

Depreciation is also deducted from gross profit. Depreciation takes into account the wear and tear on some assets, such as machinery, tools and furniture, which are used over the long term. Companies spread the cost of these assets over the periods they are used. This process of spreading these costs is called depreciation or amortization. The "charge" for using these assets during the period is a fraction of the original cost of the assets.

After all operating expenses are deducted from gross profit, you arrive at operating profit before interest and income tax expenses. This is often called "income from operations."

Next companies must account for interest income and interest expense. Interest income is the money companies make from keeping their cash in interest-bearing savings accounts, money market funds and the like. On the other hand, interest expense is the money companies paid in interest for money they borrow. Some income statements show interest income and interest expense separately. Some income statements combine the two numbers. The interest income and expense are then added or subtracted from the operating profits to arrive at operating profit before income tax.



Finally, income tax is deducted and you arrive at the bottom line: net profit or net losses. (Net profit is also called net income or net earnings.) This tells you how much the company actually earned or lost during the accounting period. Did the company make a profit or did it lose money?

## Earnings Per Share or EPS

Most income statements include a calculation of earnings per share or EPS. This calculation tells you how much money shareholders would receive for each share of stock they own if the company distributed all of its net income for the period.

To calculate EPS, you take the total net income and divide it by the number of outstanding shares of the company.

## Cash Flow Statements

Cash flow statements report a company's inflows and outflows of cash. This is important because a company needs to have enough cash on hand to pay its expenses and purchase assets. While an income statement can tell you whether a company made a profit, a cash flow statement can tell you whether the company generated cash.

A cash flow statement shows changes over time rather than absolute dollar amounts at a point in time. It uses and reorders the information from a company's balance sheet and income statement.

The bottom line of the cash flow statement shows the net increase or decrease in cash for the period. Generally, cash flow statements are divided into three main parts. Each part reviews the cash flow from one of three types of activities: (1) operating activities; (2) investing activities; and (3) financing activities.

## Operating Activities

The first part of a cash flow statement analyzes a company's cash flow from net income or losses. For most companies, this section of the cash flow statement reconciles the net income (as shown on the income statement) to the actual cash the company received from or used in its operating activities. To do this, it deducts from net income any non-cash items (such as depreciation expenses) and any cash that was used or provided by other operating assets and liabilities.

## Investing Activities

The second part of a cash flow statement shows the cash flow from all investing activities, which generally include purchases or sales of long-term assets, such as property, plant and equipment, as well as investment securities. If a company buys a piece of machinery, the cash flow statement would reflect this activity as a cash outflow from investing activities because it used cash. If the company decided to sell off some investments from an investment portfolio, the proceeds from the sales would show up as a cash inflow from investing activities because it provided cash.

## Financing Activities

The third part of a cash flow statement shows the cash flow from all financing activities. Typical sources of cash flow include cash raised by selling stocks and bonds or borrowing from banks. Likewise, paying back a bank loan would show up as a use of cash flow.

## Read the Footnotes

A horse called “Read The Footnotes” ran in the 2004 Kentucky Derby. He finished seventh, but if he had won, it would have been a victory for financial literacy proponents everywhere. It’s so important to *read the footnotes*. The footnotes to financial statements are packed with information. Here are some of the highlights:

Significant accounting policies and practices – Companies are required to disclose the accounting policies that are most important to the portrayal of the company’s financial condition and results. These often require management’s most difficult, subjective or complex judgments.

Income taxes – The footnotes provide detailed information about the company’s current and deferred income taxes. The information is broken down by level – federal, state, local and/or foreign, and the main items that affect the company’s effective tax rate are described.

Pension plans and other retirement programs – The footnotes discuss the company’s pension plans and other retirement or post-employment benefit programs. The notes contain specific information about the assets and costs of these programs, and indicate whether and by how much the plans are over- or under-funded.

Stock options – The notes also contain information about stock options granted to officers and employees, including the method of accounting for stock-based compensation and the effect of the method on reported results.

## Read the MD&A

You can find a narrative explanation of a company's financial performance in a section of the quarterly or annual report entitled, "Management's Discussion and Analysis of Financial Condition and Results of Operations." MD&A is *management's* opportunity to provide investors with its view of the financial performance and condition of the company. It's management's opportunity to tell investors what the financial statements show and do not show, as well as important trends and risks that have shaped the past or are reasonably likely to shape the company's future.

The Security and Exchange Commission SEC's rules governing MD&A require disclosure about trends, events or uncertainties known to management that would have a material impact on reported financial information. The purpose of MD&A is to provide investors with information that the company's management believes to be necessary to an understanding of its financial condition, changes in financial condition and results of operations. It is intended to help investors to see the company through the eyes of management. It is also intended to provide context for the financial statements and information about the company's earnings and cash flows.

## Financial Statement Ratios and Calculations

You've probably heard people banter around phrases like "P/E ratio," "current ratio" and "operating margin." But what do these terms mean and why don't they show up on financial statements? Listed below are just some of the many ratios that investors calculate from information on financial statements and then use to evaluate a company. As a general rule, desirable ratios vary by industry.

*Debt-to-equity ratio* compares a company's total debt to shareholders' equity. Both of these numbers can be found on a company's balance sheet. To calculate debt-to-equity ratio, you divide a company's total liabilities by its shareholder equity, or

$$\text{Debt-to-Equity Ratio} = \text{Total Liabilities} / \text{Shareholders' Equity}$$

If a company has a debt-to-equity ratio of 2 to 1, it means that the company has two dollars of debt to every one dollar shareholders invest in the company. In other words, the company is taking on debt at twice the rate that its owners are investing in the company.

*Inventory turnover ratio* compares a company's cost of sales on its income statement with its average inventory balance for the period. To calculate the average inventory balance for the period, look at the inventory numbers listed on the balance sheet. Take the balance listed for the period of the report and add it to the balance listed for the previous comparable period, and then divide by two. (Remember that balance sheets are snapshots in time. So the inventory balance for the previous period is the beginning balance for the current period, and the inventory balance for the current period is the ending balance.) To calculate the inventory turnover ratio, you divide a company's cost of sales (just below the net revenues on the income statement) by the average inventory for the period, or

Inventory Turnover Ratio = Cost of Sales / Average Inventory for the Period

If a company has an inventory turnover ratio of 2 to 1, it means that the company's inventory turned over twice in the reporting period.

*Operating margin* compares a company's operating income to net revenues. Both of these numbers can be found on a company's income statement. To calculate operating margin, you divide a company's income from operations (before interest and income tax expenses) by its net revenues, or

Operating Margin = Income from Operations / Net Revenues

Operating margin is usually expressed as a percentage. It shows, for each dollar of sales, what percentage was profit.

*P/E ratio* compares a company's common stock price with its earnings per share. To calculate a company's P/E ratio, you divide a company's stock price by its earnings per share, or

P/E Ratio = Price per share / Earnings per share

If a company's stock is selling at \$20 per share and the company is earning \$2 per share, then the company's P/E Ratio is 10 to 1. The company's stock is selling at 10 times its earnings.

*Working capital* is the money leftover if a company paid its current liabilities (that is, its debts due within one-year of the date of the balance sheet) from its current assets.

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

### Bringing It All Together

Although this Manuscript discusses each financial statement separately, keep in mind that they are all related. The changes in assets and liabilities that you see on the balance sheet are also reflected in the revenues and expenses that you see on the income statement, which result in the company's gains or losses. Cash flows provide more information about cash assets listed on a balance sheet and are related, but not equivalent, to net income shown on the income statement. And so on. No one financial statement tells the complete story. But combined, they provide very powerful information for investors. And information is the investor's best tool when it comes to investing wisely.

## The Basics of Foreign Trade and Exchange

### Growing Trade, Shrinking World

What is international trade?

World Trade is Diverse

Trade: Important for Economic Well Being

Trade: Why Do It

### Benefits of Trade

Specialization and its Benefits

Law of Comparative Advantage

Benefits of Diversity

Competitiveness

Economies of Scale

Knowledge-intensive Products Contribute to the U.S. Boom

### Free Trade Vs. Protectionism

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### Foreign Currency Exchange

- Foreign Exchange Market: What is it?
- Foreign Exchange Market Participants
- Foreign Exchange Rates
- Determination of Foreign Exchange Rates
- Foreign Currency Trading
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- Role of Central Banks
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- Working Across Borders
- International Organizations and Trade Issues
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### **Growing Trade, Shrinking World**

Americans drive cars made in Germany, use VCR's made in Japan and wear clothing made in China. Japanese watch American movies, Egyptians drink American cola and Swedes jog in American running shoes. The world economy is more integrated than ever before.

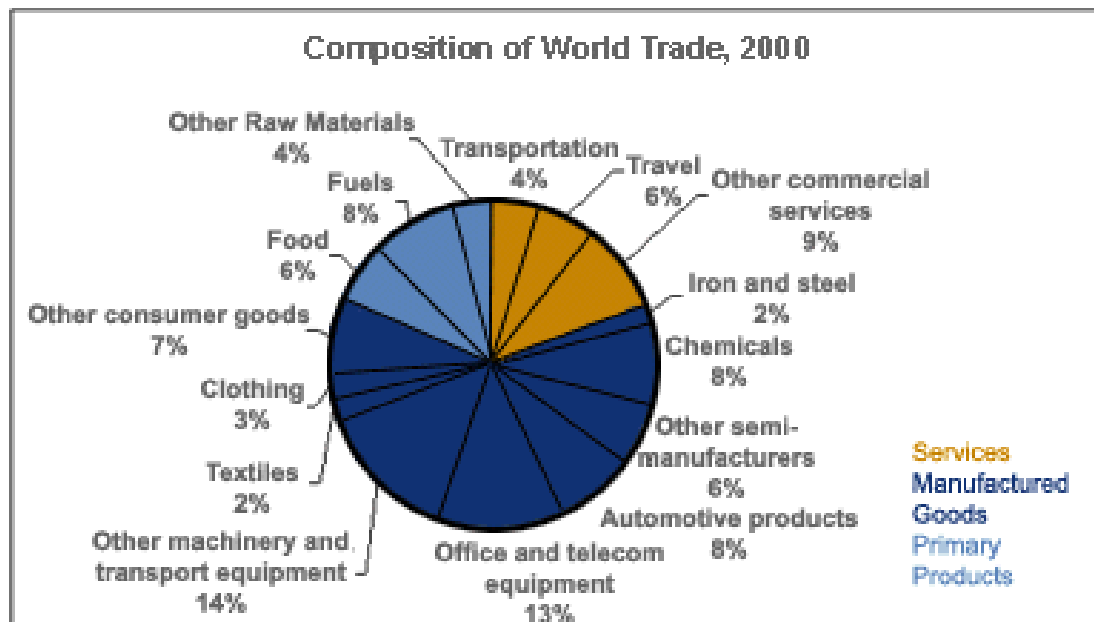
#### **What is international trade?**

**International trade** shapes our everyday lives and the world we live in. Nearly every time we make a purchase we are participating in the global economy. Products and their components come to our store shelves from all over the world.

**International trade** is the system by which countries exchange goods and services. Countries trade with each other to obtain things that are better quality, less expensive or simply different from what is produced at home.

Goods and services that a country buys from another country are called **imports**, and goods and services that are sold to other countries are called **exports**. Trade mostly takes place between companies. However, governments and individuals frequently buy and sell goods internationally.

### World Trade is Diverse



Most international trade consists of the purchase and sale of industrial equipment, consumer goods, oil and agricultural products. Services such as banking, insurance, transportation, telecommunications, engineering and tourism accounted for one-fifth of world exports in 2000.

### WORLD EXPORTS ARE UP SHARPLY

Since the end of World War II, there has been a rapid increase in international trade.

In 1950, total world merchandise exports amounted to \$58 billion

In 2000, exports were \$6.3 trillion, over a 100-fold increase



## Trade: Important for economic well being

With the increase in volume, trade has become very important to the economic well-being of many countries. In early 1960s, the United States bought less than \$1 billion of foreign cars and parts. By 2001, this figure had increased to *more* than \$189 billion.

Financial ties between United States and the rest of the world have grown significantly over time:

Number of foreign banking offices operating in the United States rose from fewer than 40 to over 600 at present.

Amount of **foreign direct investment** (FDI) was \$158 billion in 2001.

Gross transactions of long-term U.S. government securities by foreigners rose from \$144 billion in 1978 to over \$9.1 trillion in 2000.

**Foreign direct investment** is the amount of money individuals invest in companies, assets and real estate of another country.

The cost of international transportation and communication has fallen drastically, resulting in greater integration among the economies of the world. Because of this **interdependence**, economic trends and conditions in one country can strongly affect prices, wages, employment and production in other countries. Events in Tokyo, London and Mexico City have a direct effect on the everyday life of people in the U.S., just as the impact of events in New York, Washington and Chicago is felt around the globe.

If stocks on the New York Stock Exchange plummet in value, the news is transmitted instantly worldwide, and stock prices all over the world might change. This means that countries have to work together more closely and rely on each other for prosperity.

### Trade: Why do it?

International trade occurs because individuals, businesses and governments in one country want to buy goods and services produced in another country.

Trade provides people with a greater selection of goods and services to choose from.

Often these goods are available at prices lower than those in the domestic economy.

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## Benefits of Trade

### Specialization and Its Benefits

To become wealthier, countries want to use their resources—land, labor, capital and entrepreneurship—in the most efficient manner. However, there are differences among countries in the quantity, quality and cost of these resources. The advantages that a country may have, vary:

abundant minerals

climate suited to agriculture

well trained labor force

new innovative ideas

highly developed infrastructure like good roads, telecommunications system, etc.

Instead of trying to produce everything by themselves, countries often concentrate on producing things that they can produce most efficiently. They then trade those for other goods and services. In doing so, both the country and the world become wealthier.

## Specialization and Trade

Two economies, Cottonland and Woodland, have the same resources and produce both cloth and furniture.

### ***Cottonland***

Without trade, produces

8 bales of cloth

4 pieces of furniture

Total production 12 units

Time taken to produce

1 bale of cloth – 1 hour

1 piece of furniture – 2  
hours

With trade

16 bales of cloth

0 pieces of furniture

Total production 16

### ***Woodland***

Without trade, produces

4 bales of cloth

8 pieces of furniture

Total production 12 units

Time taken to produce

1 bale of cloth – 2 hours

1 piece of furniture – 1 hour

With trade

0 bales of cloth

16 pieces of furniture

Total production

Since Cottonland is more efficient in cloth production, it can double its cloth output to 16 bales a day by transferring all its resources to that industry. By doing so Cottonland will eliminate the furniture industry. However, it can trade the surplus cloth for furniture.

Similarly, Woodland can direct all its resources to the production of furniture and produce 16 pieces of furniture. Although its cloth industry will suffer it can trade the surplus pieces of furniture for cloth bales.

Through specialization and trade, the supply of goods in both economies increases, which brings the prices down, making them more affordable.

Trade also provides a wider variety of goods to consumers: cars from Japan, salmon from Scandinavia, bananas from South America, are just a few.

Most industrialized countries can produce just about anything they want. For instance, the U.S.:

could conceivably devote all its resources to the production of tropical fruits.

could compensate for the unsuitable weather by building hothouses, developing irrigation techniques and retraining workers.

would never have to import tropical fruit again.

such reallocation of resources makes no economic sense.

the resources that are directed towards the tropical fruit industry could be used more efficiently elsewhere.

countries achieve greater total wealth by devoting resources to their most productive industries.

## Law of Comparative Advantage

Even if a country can produce everything more efficiently than another country, there is still scope for trade. A country can maximize its wealth by putting its resources into its most competitive industries, regardless of whether other countries are more competitive in those industries. This is called the law of comparative advantage.

### Law of Comparative Advantage

Suppose Cottonland produces both cloth and furniture better than Woodland:

	<i>Cottonland</i>	<i>Woodland</i>
Bales of cloth per day	10	2
Pieces of furniture per day	5	3

Cottonland has an **absolute advantage**—is more efficient—in the production of both cloth and furniture. However to achieve greater wealth, each country should specialize in the item in which it enjoys greatest advantage among all the products it produces—**comparative advantage**.

In terms of **opportunity cost**, or the cost of not transferring resources, Cottonland is twice as efficient in producing cloth as furniture.

#### Opportunity Cost

Cottonland	1 piece of furniture = 2 bales of cloth
Woodland	1 piece of furniture = 2/3 bales of cloth

Since Woodland's opportunity cost for producing furniture is less than Cottonland's, it makes economic sense for Woodland to focus on furniture.

Cottonland should continue producing cloth and trade for Woodland's furniture.

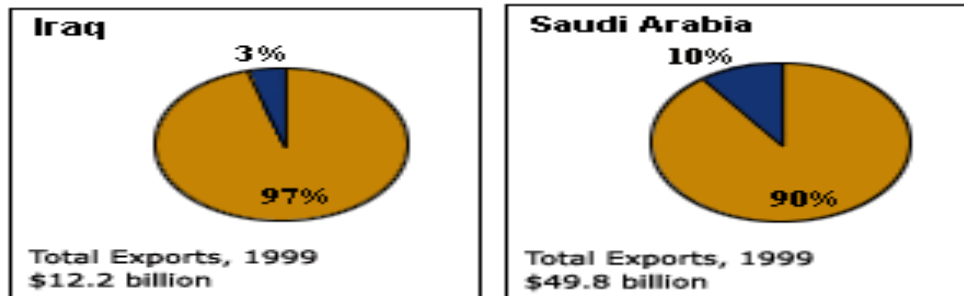
Whereas, Woodland should concentrate on furniture and trade it for cloth with Cottonland. Channeling resources into the most productive enterprise in each country will result in more products to trade.

### Benefits of Diversification

Even though it makes economic sense to allocate resources to the most productive industries, no country wants to rely on only a few products. This makes the country vulnerable to changes in the world economy, such as recession, new trade laws and treaties, and new technologies.

A country that relies too heavily on one product is especially susceptible to market forces. If demand suddenly drops or if a cheaper alternative becomes available, the economy of that country could be damaged.

Many Middle East countries that are largely dependent on their oil exports see their economic fortunes rise and fall in tandem with the oil market.



The degree to which countries specialize is influenced by that country's **terms of trade**—i.e. the relative prices of a country's imports and exports. It is most advantageous to have declining import prices compared with the prices of exports. Exchange rates and productivity differences affect the terms of trade more than any other factors.

By developing a diversified economy, a country can make sure that even if some industries are suffering, other, more competitive industries will keep the economy relatively healthy. The United States is competitive in finance, entertainment, aerospace, industrial equipment, pharmaceuticals and communications, among others.

## Competitiveness

Competitiveness is used to describe the relative productivity of companies and industries. If one company can produce better products at lower prices than another, it is said to be more competitive. This is a matter of concern for governments, since it is difficult for uncompetitive industries to survive.

In the long run, competitiveness depends on:

- a country's natural resources,
- its stock of machinery and equipment, and
- the skills of its workers in creating goods and services that people want to buy.

Natural resources are predetermined and must be used efficiently, but a country's infrastructure and its workers' skills have to be developed over time. The ability of a society to do this effectively determines whether it can remain competitive in the global economy.

## Economies of Scale

The law of comparative advantage says that a country can become more competitive by directing its resources to its most efficient industries. This enables a country to achieve **economies of scale**—increasing its output in a particular industry so that its costs per unit decrease. Such lower-cost goods are more in demand in international markets.

Certain industries that require heavy research and development or capital expenditures cannot be competitive unless they can spread the costs over many units. If a sophisticated weapons industry knows that it has access to foreign markets and could export, it may increase the scale of its manufacturing operations and become more efficient and competitive in the international markets.

Other factors affecting a country's trade competitiveness can be complex.

Sometimes it is difficult to move resources from one industry to another—it would cost a great deal of money to turn a shoe factory into a car factory.

Governments often attempt to restrict or encourage international trade to achieve domestic economic goals—increasing employment in certain industries, or maintaining economic independence.

### Knowledge-Intensive Products Contributed to a U.S. Export Boom

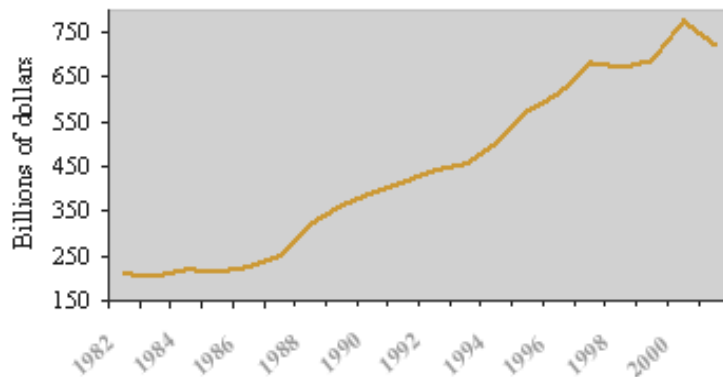
From 1986 to 2001 there was an enormous boom in U.S. exports, especially in manufactured goods. Exports went up from \$227 billion to \$731 billion. One of the driving forces behind the increase in exports was the success of U.S. companies in selling "knowledge-intensive" manufactured goods to other industrialized countries.

The value of knowledge-intensive products depends on the skills that went into producing them, rather than the actual cost of the components. For example, while producing a new compact disc, the expenses of paying the artist, advertising, marketing and legal and other fees far outweigh the actual cost of the physical disc.

Production of such knowledge-intensive goods relies more on a well-educated and skilled workforce than on natural resources. A number of products fit this description, from computer software to custom-built aircraft engine parts. Such products are produced for specific market niches and substitutes are not easy to come by.

These knowledge-intensive products are becoming a major force in international trade and a source of wealth for economies well positioned to compete in those markets.

**Merchandise Exports Since 1982**



## Free Trade vs. Protectionism

All governments regulate foreign trade. The extent to which they do so is a matter of great controversy and debate. The news is full of reports of various groups protesting about:

- new trade agreements,

- adverse effects of trade on domestic industry, and

- dilution of the environmental and labor standards, especially in the developing economies.

**Free trade** proponents stand for an open trading system with few limitations and little government involvement. Advocates of **protectionism** believe that governments must take action to regulate trade and subsidize industries to protect their domestic economy.

Although the amount of government involvement in trade varies from country to country and product to product, overall barriers to trade have been lowered since World War II. All governments practice protectionism to some extent. The debate is over how many, or how few, such measures should be used to reach the country's long-term macroeconomic goals.



Completely free trade would:

deliver the most goods and services at the lowest possible cost;

provide consumers the freedom to buy from whomever produces the goods and services most efficiently; and

result in competition for domestic industries which may lead to unemployment and slower growth at the least efficient companies.

If cars can be produced more efficiently in another country and consumers are free to buy them from anywhere, the domestic auto industry will lose business and may ask for government protection by limiting imports of lower-cost cars.

### Arguments for protection

There are many arguments forwarded by advocates of protectionism:

***Cheap labor:*** Less developed countries have a natural cost advantage as labor costs in those economies are low. They can produce goods less expensively than developed economies and their goods are more competitive in international markets.

***Infant industries:*** Protectionists agree that infant, or new, industries must be protected to give them time to grow and become strong enough to compete internationally, especially industries that may provide a firm foundation for future growth, e.g. computers and telecommunications. However, critics point out that some of these infant industries never "grow up."

***National security concerns:*** Any industry crucial to national security, such as producers of military hardware, should be protected. That way the nation will not have to depend on outside suppliers during political or military crises.

***Diversification of the economy:*** If a country channels all its resources into a few industries, no matter how internationally competitive those industries are, it runs the risk of becoming too dependent on them. Keeping weaker industries competitive through protection may help in diversifying the nation's economy.

***Lowering environmental standards:*** In the rush to meet the world demand for their exports, some countries may compromise on critical environmental standards. This is particularly true for less developed countries that do not have well defined environmental protection laws in place.

## Methods of Protection

Governments use a variety of tools to manage their countries' international trade positions.

- **Tariffs:** Tariffs are taxes on imports. Tariffs make the item more expensive for consumers, thereby reducing the demand.

### Tariffs

Suppose there is a U.S company and a foreign company producing widgets:

	<b>Cost to produce</b>
U.S.- made widget	\$1.00
Foreign-made widget	\$0.75

The American widget factory will find it difficult to stay competitive under this scenario. Now, if the U.S. were to impose a tariff of 60 percent:

	<b>New cost to U.S consumers</b>
U.S.-made widget	\$1.00
Foreign-made widget	\$1.20 = [(0.75x.60)+0.75]

If consumers base their purchases only on price, the demand for the foreign widget would fall and the U.S. widget industry would prosper.

If no tariff were imposed, as under free trade, Americans would have saved money by buying the cheaper foreign widget. The U.S. widget industry would either have to become more efficient in order to compete with the less expensive imported products or face extinction.

Tariffs need not push the price of an import above the price of its domestic counterpart. They should be just high enough to reduce the price differential between the import and the domestic good. Tariffs are usually levied as a percentage of the value of the import, although sometimes a flat rate may be charged.

**Import Quotas:** Governments sometimes restrict the sale of foreign goods by imposing import quotas. These limit the quantity of foreign goods that can be imported and help domestic producers by limiting the share of the market that can be taken by foreigners.

**Voluntary restraints:** Sometimes governments negotiate agreements whereby a country agrees to voluntarily limit its export of a certain product. Japan voluntarily limited its export of cars to the United States in 1992 to 1.65 million cars per year.

With tariffs, it is the importing country that stands to gain through increases in the tax revenue. However, in case of quantitative restraints, the exporting country gains as the price of the imported good rises.

Both import quotas and voluntary restraints thwart the functioning of the free market. The quantity of goods remains constant while the price changes, instead of demand and supply determining both quantity and price.

**Subsidies:** Another way to achieve the goals of protectionism is to make the domestic industry more competitive. Subsidies, which are grants by the government to an industry, can accomplish this. Subsidies can be:

Direct—outright payments

Indirect—special tax breaks or incentives, buying of surplus goods, providing low-interest loans or guaranteeing private loans.

For example, the United States subsidizes the sugar and dairy industries, among others.

**Trade ban:** Sometimes governments ban trade with certain countries for political reasons—during times of war or political crises. Governments also ban import of certain products to protect domestic industries. For instance, Japan bans importation of rice to protect its domestic rice industry.

**Imposing standards:** Health, environmental and safety standards often vary from country to country. These may act as a barrier to free trade and a tool of protectionism. For example, the European Union has very stringent health and safety standards that goods have to meet in order to be imported.

**Others:** Apart from the legal restrictions there may be other less formal obstacles that impede trade. Cultural factors are one such obstacle.

## Arguments for Free Trade

The debate about how free a trading system should be is an old one, with positions and arguments evolving over time. U.S. free-trade advocates typically argue that consumers benefit from freer trade and forward many reasons in support of their theory:

Free trade and the resulting foreign competition forces U.S. companies to keep prices low.

Consumers have a larger variety of goods and services to choose from in open markets.

Domestic companies have to modernize plants, production techniques and technologies to keep themselves competitive.

Any kind of protectionist measures, like tariffs, often bring about retaliatory actions from foreign governments, which may restrict the sale of U.S. goods in their markets. This may result in inflation and unemployment in the U.S. as the export industries suffer and prices of imports rise.

An open trading system creates a better climate for investment and entrepreneurship than one in which there is fear of governments cutting off access to certain markets.

### Protectionist Measures: The Costs Involved

Suppose the United States placed a tariff on imported wrenches that were less expensive than domestic wrenches. There would be four basic costs to the economy:

wrench-buyers will have to pay more for their protected U.S.-made wrenches than they would have for the imported wrenches;

jobs will be lost at retail and shipping companies that import foreign-made wrenches;

jobs will be lost in any domestic industries that suffer from retaliatory tariffs; and

the extra cost of the wrenches gets passed on to whatever products and services use these wrenches.

These costs will have to be weighed against the number of jobs the tariff would save to get a true picture of the impact of the tariff.

## Measures of Trade

Balance of trade and balance of payments are two of the statistics most widely used to measure a country's international trade position.

Balance of trade is the difference between a nation's exports and imports of both goods and services.

Balance of payments gives a complete summary of all economic transactions that involve money flowing into or from a country.

Exports are the value of goods and services sold abroad over any specific period of time.

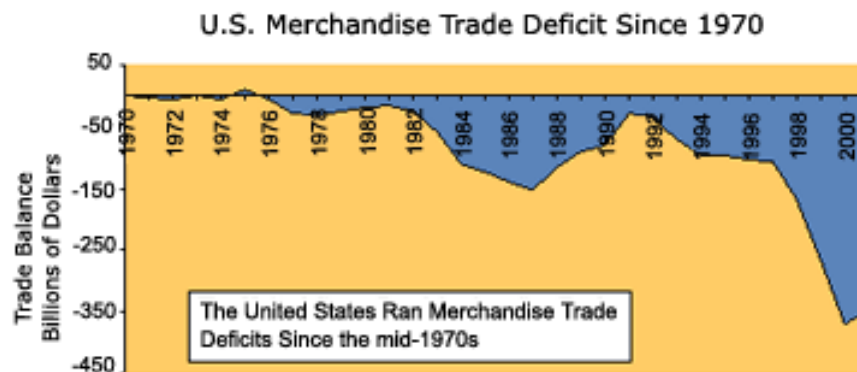
Imports are the value of goods and services purchased from foreign countries over a specific period of time.

A "favorable" balance of trade, or **trade surplus**, occurs when exports exceed imports. A "negative" balance, or **trade deficit**, occurs when the imports surpass exports.

From the mid-1970s through 2001, the United States ran persistent trade deficits. Economists disagree as to what effect these deficits had on the economy, but they allowed:

foreigners to accumulate U.S. dollars from U.S. import payments; and

facilitated the purchase of U.S. goods, services and assets, such as real estate and companies, by



foreigners.

The balance of trade alone does not give the whole picture. The detailed record of all economic transactions between a country and the rest of the world is called the **balance of payments**. This includes trade in:

goods and services; and

financial and non-financial assets

The balance of payments is separated into two main accounts:

**Current account**—records transactions that involve the export or import of goods and services and interest payments. The entire merchandise trade balance is contained in this account.

**Capital account**—records transactions that involve the purchase or sale of assets or investments, like companies, stocks, bonds, bank accounts, real estate and factories.

If you buy an automobile made by a factory in Germany, the transaction will be recorded in the current account. However, if you buy the automobile factory or stock in the automobile factory, the transaction will be a part of the capital account.

**Table 1: U.S. International Transactions, 2001  
(Billions of dollars)**

	Credits	Debits
<b>Current account</b>		
Exports	1,298.3	
Of which:		
Merchandise	720.8	
Investment income received	293.8	
Other services	283.7	
		1,665.3
Imports		
Of which:		1,147.4
Merchandise		312.9
Investment income paid		204.9
Other services		50.5
		417.5
Net unilateral transfers		
<i>Balance on current account</i>		
[(1)+(2)+(3)]		
<b>Capital Account</b>		
U.S. assets held abroad	4.9	439.6
Of which:		434.7
Official reserve assets	895.5	
Other assets		
	6.1	
Foreign assets held in U.S.	889.4	
Of which:	455.9	
Official reserve assets		
Other assets		38.4
<i>Balance on capital account</i>		
[(4)+(5)]		
Statistical discrepancy		
[sum of (1) through (5)]		

Source: U.S. Department of Commerce, Bureau of Economic Analysis, U.S. International Transactions Accounts Data. Totals may differ due to rounding.

Every international transaction automatically enters the balance of payments twice, once as a credit and once as a debit, resulting in two equal and opposite entries. A transaction that involves money flowing into the country is recorded as a *balance of payment credit* and anything that draws money out of the country is a *balance of payment debit*.

For example, if you buy a camera from a Japanese company, XYZ Inc., and pay by check, your purchase results in the following two entries in the balance of payments statements:

	Credit	Debit
<b>Current account</b>		
Camera purchase (U.S. import)		\$1,000
<b>Capital account</b>		
Sale of bank deposit (U.S. asset export)	\$1,000	

Your payment to buy a good (the camera) from a foreign company is recorded as a *debit* in the U.S. *current account*. Let's say XYZ Inc. deposits the check in their account at ABC Bank in New York. This means, XYZ Inc. has purchased, and ABC Bank has sold, a U.S. asset (a bank deposit) worth \$1,000—and the transaction will appear as a *credit* in the U.S. *capital account*.

This system of double-entry bookkeeping tries to ensure that the current and capital accounts are balanced. However, due to accounting conventions and differences in the recorded values of transactions, this does not always happen. Accounting for these differences, called *statistical discrepancies*, makes possible the following fundamental identity of the balance of payment accounts:

$$\text{Current account} + \text{Capital account} + \text{Statistical discrepancy} = 0$$

## CURRENT ACCOUNT

The current account consists of four sub accounts:

*Merchandise* trade consists of all raw materials and manufactured goods bought, sold, or given away. Since early 1990s, the merchandise trade account has been combined with services to determine the "*balance of trade*."

*Services* include tourism, transportation, engineering, and business services, such as law, management consulting, and accounting. Fees from patents and copyrights on new technology, software, books, and movies also are recorded in the service category.



*Income receipts* record investment incomes made up of interest and dividend payments and earnings of domestic owned firms operating abroad.

*Unilateral transfers* are payments that do not correspond to the purchase of any good, service or asset. These usually take the form of international aid, gifts, or worker remittances from abroad.

**Table 2: Calculating the balance on the current account**  
(Refer to Table 1 above)

<b>Current Account:</b>	<b>Billions of dollars</b>	
Exports		1,298.3
+ Imports	(-)	1,665.3
+ Net unilateral transfers (inflows minus outflows)	(-)	50.5
<b>Balance on current account</b>	<b>(-)</b>	<b>\$417.5 (1)</b>

## CAPITAL ACCOUNT

The capital account measures the difference between sales of assets to foreigners and purchases of assets located abroad.

*U.S.-owned assets abroad* are divided into official reserve assets, government assets, and private assets. These assets include gold, foreign currencies, foreign securities, reserve position in the International Monetary Fund, U.S. credits and other long-term assets, direct foreign investment, and U.S. claims reported by U.S. banks.

*Foreign-owned assets in the United States* are divided into foreign official assets and other foreign assets in the United States. These assets include U.S. government, agency, and corporate securities; direct investment; U.S. currency, and U.S. liabilities reported by U.S. banks.

**Table 3: Calculating the balance on the capital account**  
(Refer to Table 1 above)

<b>Capital Account:</b>	<b>Billions of dollars</b>	
Purchase of assets abroad (U.S. owned assets abroad)	(- )	439.6
+ Sales of assets to foreigners (foreign-owned assets in U.S.)		895.5
<b>Balance on the capital account</b>		<b>\$455.9 (2)</b>

## BALANCE OF PAYMENT DEFICIT AND SURPLUS

In theory, the current account should balance with the capital account. The sum of the balance of payments statements should be zero. Therefore, when a country buys more goods and services than it sells (a current account deficit), it must finance the difference by borrowing, or by selling more capital assets than it buys (a capital account surplus). A persistent current account deficit amounts to exchanging capital assets for goods and services. Large trade deficits mean that a country is borrowing from abroad and it appears as an inflow of foreign capital in the balance of payments.

The accounts do not exactly offset each other, due to statistical discrepancies, accounting conventions, and exchange rate movements that change the recorded value of transactions.

### Calculating Statistical Discrepancy on the Balance of Payment Accounts

(Refer to Table 2 and Table 3 above)

If (1) and (2) are not equal, the difference (with the sign changed) is attributed to statistical discrepancies.

$$(-)417.5 + 455.9 = 38.4$$

Thus *statistical discrepancies* were **(-) \$38.4** billion for 2001.

## 2001 U.S. BALANCE OF PAYMENTS

In 2001, the U.S imported goods and services worth \$1,352 billion, while its exports were only \$1,004 billion. And with net unilateral transfers of \$50.5 billion, the deficit on the current account amounted to \$417 billion. To cover this deficit, the United States required a capital inflow of the same amount. That means net borrowings or net sales of assets to foreigners of the same magnitude.

In the same period, the capital account registered an increase of \$439 billion in U.S assets located abroad and a \$895 billion increase in foreign assets held in the U.S. giving us a surplus balance of \$456 billion.

The difference, of approximately \$39 billion, was attributed to statistical discrepancy, leaving a zero balance in the balance of payment statement.

## BALANCE OF PAYMENTS AND INTEREST RATES

The balance of payments is influenced by many factors, including the financial and economic climate of other countries. If the U.S. banks are offering higher interest rates for deposits than banks abroad, foreign funds will flow into the United States. Conversely, if interest rates are higher abroad, U.S. investors will choose to invest their money abroad.

<i>Interest rate in U.S.</i>	<i>Interest rate abroad</i>	<i>Fund flows</i>	<i>U.S. Capital Account</i>
High	Low	Into the	Improves
Low	High	U.S. Abroad	Weakens

## Statistics Can Have Different Interpretations

Interpretations of trade statistics sometimes can differ sharply, depending on the questions being asked. The U.S. trade deficit has been viewed as good, bad, irrelevant, overstated, understated and illusory. For example, a company that exports goods to the United States will view the deficit as a sign of a healthy U.S. market. On the other hand, a U.S. based trade union may consider the deficit a sign that domestic industries are unable to compete in the world markets. In a global economy that is measured in trillions of dollars, not every transaction is going to be reported accurately. Statistics for many types of transactions rely heavily on estimates made by statisticians, and even the best estimates are sometimes incorrect. This can produce a skewed measurement of what is actually happening in the economy.

**Measuring imports and exports** - **Imports:** U.S. importers file tax documents with the U.S. Customs Service describing the type and value of imported goods. These reports are processed and tabulated to arrive at the overall level of U.S. imports. Inaccurate reports, delays in processing data, and smuggling can affect their value. **Exports:** There is no tax on exports, so to collect information, the U.S. Department of Commerce developed a form called the Shippers' Export Declaration (SED) form, which is filled out when goods are sent overseas. These are tallied to arrive at export totals.

The Bretton Woods Agreements Act of 1945 requires the publication of balance of payments information. The statistics are generally reliable although the collection process is often difficult, especially in case of data on travel, services, direct foreign investment and financial transactions. Sometimes it is difficult to classify a good as an import or an export. Trade is usually tabulated on the basis of national origin rather than national ownership. If a product is shipped from the U.S. to Germany, it is considered a U.S. export and a German import. It makes no difference whether a foreign company owns the U.S. factory or if it is a U.S. firm in Germany that imports the product. If a U.S. company owns a plant in Brazil and sells a product to a Japanese company in Canada, the transaction is recorded as a Canadian import and a Brazilian export. It is also difficult to assign a value to goods. To compare the exports of two countries in a given year, it is necessary to convert the figures into the same currency. However, there can be distortions due to:

**Exchange rate fluctuations:** The exchange rate may distort the value of trade statistics. It may appear that one country is exporting more than another when, in fact, the distortions could be attributed to variations in exchange rates and not the quality or quantity of exports.

**Real estate values:** Real estate values have to be adjusted to current market prices. **Depreciation:** Allowances for equipment, plant and machinery and other real assets that depreciate over time have to be made. **Inflation:** Rising prices of commodities must be taken into account before assigning a value to exports. Changes in trade statistics do not necessarily signify changes in a nation's trading patterns; the change may merely result from a change in the way the data is presented.

## Foreign Currency Exchange

### Foreign Exchange Market: What is it?

To buy foreign goods or services, or to invest in other countries, companies and individuals may need to first buy the currency of the country with which they are doing business. Generally, exporters prefer to be paid in their country's currency or in U.S. dollars, which are accepted all over the world.

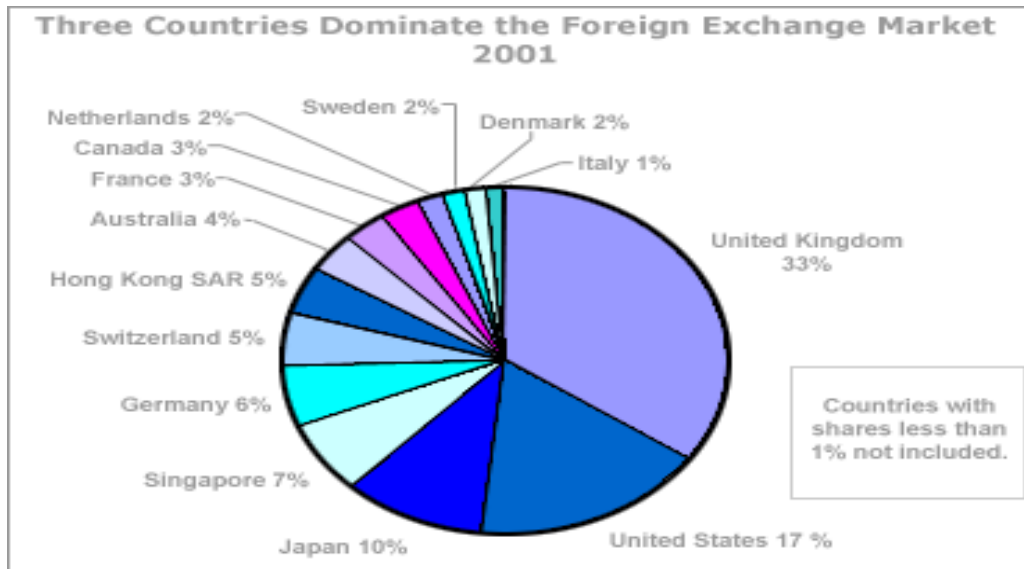
When Canadians buy oil from Saudi Arabia they may pay in U.S. dollars and not in Canadian dollars or Saudi dinars, even though the United States is not involved in the transaction.

The **foreign exchange market**, or the "FX" market, is where the buying and selling of different currencies takes place. The price of one currency in terms of another is called an **exchange rate**.

The market itself is actually a worldwide network of traders, connected by telephone lines and computer screens—there is no central headquarters. There are three main centers of trading, which handle the majority of all FX transactions—United Kingdom, United States, and Japan.

Transactions in Singapore, Switzerland, Hong Kong, Germany, France and Australia account for most of the remaining transactions in the market. Trading goes on 24 hours a day: at 8 a.m. the exchange market is first opening in London, while the trading day is ending in Singapore and Hong Kong. At 1 p.m. in London, the New York market opens for business and later in the afternoon the traders in San Francisco can also conduct business. As the market closes in San Francisco, the Singapore and Hong Kong markets are starting their day.

The FX market is fast paced, volatile and enormous—it is the largest market in the world. In 2001 on average, an estimated \$1,210 billion was traded each day—roughly equivalent to every person in the world trading \$195 each day.



## Foreign Exchange Market Participants

There are four types of market participants—banks, brokers, customers, and central banks.

**Banks** and other financial institutions are the biggest participants. They earn profits by buying and selling currencies from and to each other. Roughly two-thirds of all FX transactions involve banks dealing directly with each other.

**Brokers** act as intermediaries between banks. Dealers call them to find out where they can get the best price for currencies. Such arrangements are beneficial since they afford anonymity to the buyer/seller. Brokers earn profit by charging a commission on the transactions they arrange.

**Customers**, mainly large companies, require foreign currency in the course of doing business or making investments. Some even have their own trading desks if their requirements are large. Other types of customers are individuals who buy foreign exchange to travel abroad or make purchases in foreign countries.

**Central banks**, which act on behalf of their governments, sometimes participate in the FX market to influence the value of their currencies.

With more than \$1.2 trillion changing hands every day, the activity of these participants affects the value of every dollar, pound, yen or euro.

The participants in the FX market trade for a variety of reasons:

- to earn short-term profits from fluctuations in exchange rates,
- to protect themselves from loss due to changes in exchange rates, and
- to acquire the foreign currency necessary to buy goods and services from other countries.

### Foreign Exchange Rates

Most common contact with foreign exchange occurs when we travel or buy things in other countries.

Suppose a U.S. tourist travelling in London wants to buy a sweater. Price tag is 100 pounds.

Current exchange rate		Price of sweater in dollars
\$1.45 to £1		$100 \times 1.45 = \$145.00$
\$1.30 to £1	Pound falls	$100 \times 1.30 = \$130.00$
\$1.60 to £1	Pound rises	$100 \times 1.60 = \$160.00$

Thus, small changes in exchange rates may not seem significant. But when billions of dollars are traded, even a hundredth of a percentage point change in exchange rates becomes important.

<b>Stronger US dollar implies</b>	U.S. can buy foreign goods more cheaply	<input type="checkbox"/>	Cost of purchasing foreign goods falls
	Foreigners find U.S. goods more expensive and demand falls	<input type="checkbox"/>	Does not help firms that produce for exports
<b>Weaker U.S. dollar implies</b>	Foreigners buy more U.S. goods	<input type="checkbox"/>	Helps firms that rely on exports
	Foreign goods become more expensive	<input type="checkbox"/>	Demand for imports falls

It would seem logical that if the dollar **weakens**, the trade balance will improve, as exports would rise. However, this does not always happen. U.S. trade balance usually worsens for a few months.

The **J-Curve** explains why the trade position does not improve soon after the weakening of a currency. Most import/export orders are taken months in advance. Immediately after a currency's value drops, the volume of imports remains about the same, but the prices in terms of the home currency rise. On the other hand, the value of the domestic exports remains the same, and the difference in values worsens the trade balance until the imports and exports adjust to the new exchange rates.

Exchange rates are an important consideration when making international investment decisions. The money invested overseas incurs an exchange rate risk.

When an investor decides to "cash out," or bring his money home, any gains could be magnified or wiped out depending on the change in the exchange rates in the interim. Thus, changes in exchange rates can have many repercussions on an economy:

- affects the prices of imported goods

- affects the overall level of price and wage inflation

- influences tourism patterns

- may influence consumers' buying decisions and investors' long-term commitments.

### **Determination of Foreign Exchange Rates**

Exchange rates respond directly to all sorts of events, both tangible and psychological—

- business cycles;

- balance of payment statistics;

- political developments;

- new tax laws;

- stock market news;

- inflationary expectations;

- international investment patterns;

- and government and central bank policies among others.



At the heart of this complex market are the same forces of demand and supply that determine the prices of goods and services in any free market. If at any given rate, the demand for a currency is greater than its supply, its price will rise. If supply exceeds demand, the price will fall.

The supply of a nation's currency is influenced by that nation's monetary authority, (usually its central bank), consistent with the amount of spending taking place in the economy. Government and central banks closely monitor economic activity to keep money supply at a level appropriate to achieve their economic goals.

Too much money  inflation  value of money declines  prices rise  
 Too little money  sluggish economic growth  rising unemployment

Monetary authorities must decide whether economic conditions call for a larger or smaller increase in the money supply.

Sources for currency demand on the FX market:

The currency of a growing economy with relative price stability and a wide variety of competitive goods and services will be more in demand than that of a country in political turmoil, with high inflation and few marketable exports.

Money will flow to wherever it can get the highest return with the least risk. If a nation's financial instruments, such as stocks and bonds, offer relatively high rates of return at relatively low risk, foreigners will demand its currency to invest in them.

FX traders speculate within the market about how different events will move the exchange rates. For example:

News of political instability in other countries drives up demand for U.S. dollars as investors are looking for a "safe haven" for their money.

A country's interest rates rise and its currency appreciates as foreign investors seek higher returns than they can get in their own countries.

Developing nations undertaking successful economic reforms may experience currency appreciation as foreign investors seek new opportunities.

## Foreign Currency Trading

<i>"Yoshi, it's Maria in New York. May I have a price on twenty cable."</i>	<i>Yoshi it's Maria in New York. I am interested in either buying or selling 20 million British pounds."</i>
<i>"Sure. One seventy-five, twenty-thirty."</i>	<i>"Sure I will buy them from you at 1.7520 dollars to each pound or sell them to you at 1.7530 dollars to each pound."</i>
<i>"Mine twenty."</i>	<i>"I'd like to buy them from you at 1.7530 dollars to each pound."</i>
<i>"All right. At 1.7530, I sell you twenty million pounds."</i>	<i>"All right. I sell you 20 million pounds at 1.7530 dollars per pound."</i>
<i>"Done."</i>	<i>"The deal is confirmed at 1.7530."</i>
<i>"What do you think about the Japanese yen? It's up 100 pips."</i>	<i>"Is there any information you can share with me about the fact that the Japanese yen has risen one-one hundredth of a yen against the U.S. dollar in the past hour?"</i>
<i>"I saw that. A few German banks have been buying steadily all day...."</i>	<i>"Yes, German banks have been buying the Japanese yen all day, causing the price to rise a little...."</i>

Traders in the foreign exchange market make thousands of trades daily, buying and selling currencies while exchanging market information. The \$1.2 trillion that is traded everyday may be used for varied purposes:

- for the import and export needs of companies and individuals
- for direct foreign investment
- to profit from the short-term fluctuations in exchange rates
- to manage existing positions or
- to purchase foreign financial instruments

In the volatile FX market, traders constantly try to predict the behavior of other market participants. If they correctly anticipate their opponents' strategies, they can act first and beat the competition.

Traders make money by purchasing currency and selling it later at a higher price, or, anticipating the market is heading down, selling at a high price and buying back at a lower price later.

Trader **purchases** a lot of currency  **long** on the currency (e.g. long dollar, long yen)  
 Trader **sells** a lot of a currency  **short** on the currency (e.g. short sterling)

To predict the movements of currencies, traders often try to determine whether the currency's price reflects its fundamental value in terms of current economic conditions. Examining inflation, interest rates, and the relative strength of the country's economy helps them make a determination.

Currency underpriced  price will go **up**  
 Currency overpriced  price will go **down**

#### CURRENCY TRADING BETWEEN BANKS

Banks are a major force in the FX market and employ a large number of traders. Trading between banks is done in two ways—through a broker or directly with each other.

**Brokers:** If a U.S. bank trades with another bank, a FX broker may be used as an intermediary. The broker arranges the transaction, matching the buyer and seller without ever taking a position and charges a commission to both the buyer and seller. About a third of transactions are arranged in this way.

**Direct:** Mostly banks deal with each other directly. A trader "makes a market" for another by quoting a **two-way** price i.e. he is willing to buy or sell the currency. The difference between the two price quotes (the **spread**) is usually no more than 10 **pips**, or hundredths, of a currency unit.

Most currencies are quoted in terms of how many units of that currency would equal \$1. However, the British pound, New Zealand dollar, Australian dollar, Irish punt and the Euro are quoted in terms of how many U.S. dollars would equal one unit of those currencies.

The currencies of the world's large, industrialized economies, or **hard currencies**, are always in demand and are actively traded. In terms of trading volumes, the FX market is dominated by four currencies: the U.S. dollar, the euro, the Japanese yen and the British pound. Together these account for over 80 percent of the market.

It is not always easy to find a market for all currencies. The demand for currencies of less developed countries, **soft currencies**, is a lot less than for the hard currencies. Weak demand internationally along with exchange controls may make these currencies difficult to convert.

## Types of Transactions

There are different types of FX transactions:

**Spot transactions:** This type of transaction accounts for almost a third of all FX market transactions. Two parties agree on an exchange rate and trade currencies at that rate.

### Spot Transaction: How it works

A trader calls another trader and asks for a price of a currency, say British pounds.

*This expresses only a potential interest in a deal, without the caller saying whether he wants to buy or sell.*

The second trader provides the first trader with prices for both buying and selling (two-way price).

When the traders agree to do business, one will send pounds and the other will send dollars.

*By convention the payment is actually made two days later, but next day settlements are used as well.*

Although spot transactions are popular, they leave the currency buyer exposed to some potentially dangerous financial risks. Exchange rate fluctuations can effectively raise or lower prices and can be a financial planning ordeal for companies and individuals.

### Exchange Risks in Spot Transactions

Suppose a U.S. company orders machine tools from a company in Japan. Tools will be ready in six months and will cost 120 million yen. At the time of the order, the yen is trading at 120 to a dollar.

U.S. company budgets \$1 million in Japanese yen to be paid when it receives the tools (120,000,00 yen  $\div$  120 yen per dollar = \$1,000,000)

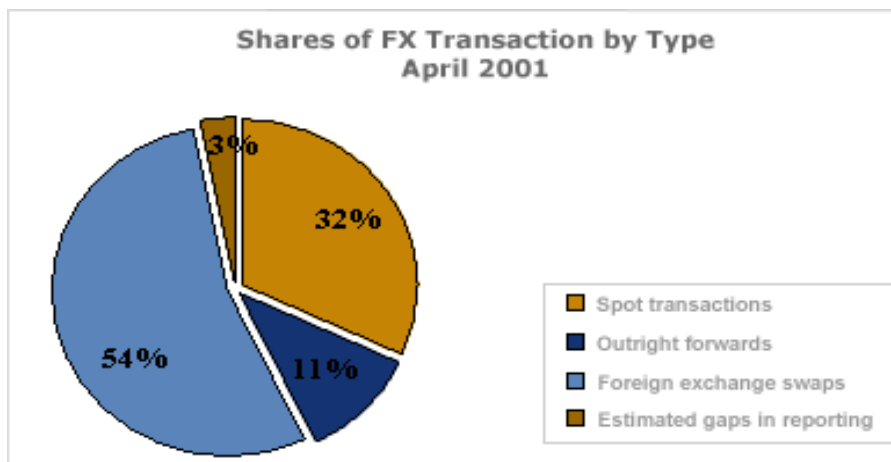
There is no guarantee that the rate will remain the same six months later. Suppose the **rate drops** to 100 yen per dollar:

Cost in U.S. dollars would increase (120,000,000  $\div$  100 = \$1,200,000) by \$200,000.

Conversely, if the **rate goes up** to 140 yen to a dollar:

Cost in U.S. dollars would decrease (120,000,000  $\div$  140 = \$857,142.86) by over \$142,000

One alternative for a company is to pay for the foreign good right away to avoid the exchange rate risk. But no one wants to part with money any sooner than necessary—if the company does pay the money in advance, it loses six months' interest and risks losing out on a favorable change in exchange rates.



**Forward transaction:** One way to deal with the FX risk is to engage in a forward transaction. In this transaction, money does not actually change hands until some agreed upon future date. A buyer and seller agree on an exchange rate for any date in the future and the transaction occurs on that date, regardless of what the market rates are then. The date can be a few days, months or years in the future.

**Futures:** Foreign currency futures are forward transactions with standard contract sizes and maturity dates — for example, 500,000 British pounds for next November at an agreed rate. These contracts are traded on a separate exchange set up for that purpose.

**Swap:** The most common type of forward transaction is the currency swap. In a swap, two parties exchange currencies for a certain length of time and agree to reverse the transaction at a later date.

In all of these transactions, market rates might change. However, the buyer and seller are locked into a contract at a fixed price that cannot be affected by any changes in the market rates. These tools allow the market participants to plan more safely, since they know in advance what their FX will cost. It also allows them to avoid an immediate outlay of cash.

### Swap Transaction: How it works

Suppose a U.S. company needs 15 million Japanese yen for a three-month investment in Japan.

It may agree to a rate of 150 yen to a dollar and swap \$100,000 with a company willing to swap 15 million yen for three months.

After three months, the U.S. company returns the 15 million yen to the other company and gets back \$100,000, with adjustments made for interest rate differentials

**Options:** To address the lack of flexibility in forward transactions, the foreign currency option was developed. An option is similar to a forward transaction. It gives its owner the right to buy or sell a specified amount of foreign currency at a specified price at any time up to a specified expiration date.

For a price, a market participant can buy the right, but not the obligation, to buy or sell a currency at a fixed price on or before an agreed upon future date. The agreed upon price is called the **strike price**.

Depending on which—the option rate or the current market rate—is more favorable, the owner may exercise the option or let the option lapse, choosing instead to buy/sell currency in the market. This type of transaction allows the owner more flexibility than a swap or futures contract.

- Option to **buy** currency  **Call option**
- Option to **sell** currency  **Put option**

### Option: How it works

Suppose a trader purchases a six-month call on one million euros at 0.88 U.S. dollars to a euro.

During the six months the trader can either purchase the euros at the 0.88 rate, or purchase them at the market rate.

Option can be sold and resold many times before the expiration date.

Options serve as an insurance policy against the market moving in an unfavorable direction.

### Floating and Fixed Exchange Rates

The FX market was not always quick to respond to changing events. For most of the 20<sup>th</sup> century, the exchange rates were **fixed**, or kept constant, according to the amount of gold for which they could be exchanged. This was called the gold-exchange standard

## Gold-Exchange Standard

Under this system, the value of all currencies was fixed in terms of how much gold for which they could be exchanged.

For example, if one ounce of gold was worth 12 British pounds or 35 U.S. dollars, the exchange rate between dollars and pounds would remain constant at just under three to one.

There were many advantages of the gold-exchange system:

- It served as a common measure of value.

- It helped keep inflation in check by keeping money supply in the gold-exchange standard economies fairly stable.

- Long-term planning was easier as rate changes were infrequent.

This system was put in place in 1944, when the leaders of allied nations met at **Bretton Woods**, New Hampshire, to set up a stable economic structure out of the chaos of World War II. The U.S. dollar was fixed at \$35 per ounce of gold and all other currencies were expressed in terms of dollars.

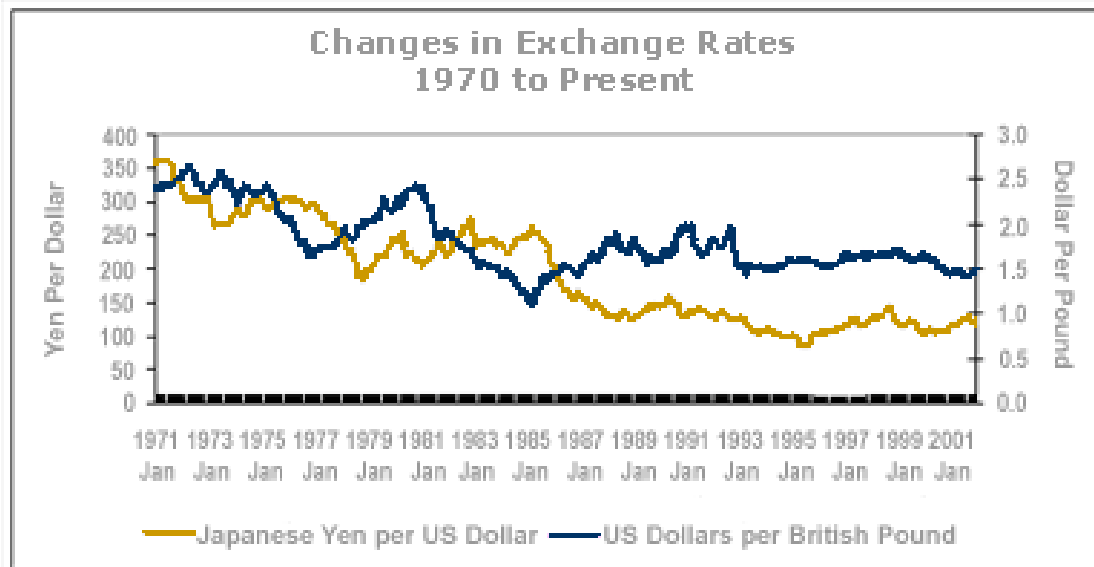
The Bretton Woods system began to weaken in the 1960s, when foreigners accumulated large amounts of U.S. dollars from post World War II aid and sales of their exports in the United States. There were concerns as to whether the U.S. had enough gold to redeem all the dollars.

With reserves of gold falling steadily, the situation could not be sustained and the U.S. decided to abandon this system. In 1971, President Nixon announced that U.S. dollars would no longer be convertible into gold. By 1973, this action led to the system of floating exchange rates that exist today. Currently, currencies rise and fall in value according to the forces of demand and supply.

After the abandonment of the gold-exchange standard, the foreign exchange market went from a relatively unimportant financial specialty to the forefront of international economics.

Under another system, the **gold standard**, U.S. households and businesses could exchange their dollars for gold. This practice was abandoned in 1933 during the Great Depression to allow freer expansion of money supply. However, foreign governments were still able to exchange their dollars for gold until 1971, when the United States terminated the gold-exchange standard entirely.





### Role of Central Banks

Despite the size and importance of the foreign exchange market, it remains largely unregulated. There is no international organization that supervises it, nor any institution that sets rules. However, since the advent of the flexible exchange rate system in 1973, governments and central banks, such as the Federal Reserve System in the United States, occasionally intervene to maintain stability in the FX market.

There is no standard definition of instability or a disorderly market—circumstance must be evaluated on a case-by-case basis. Sharp rapid fluctuations of exchange rates and traders' reluctance to be ready to either buy or sell currencies (maintaining a "two-way" market) may be signs of disorderly market.

To restore stability, the central banks often work together. However, a country taking a conservative view on intervention would act only in response to unusual circumstances that require immediate action, like political unrest or natural disasters. Most monetary authorities would be less likely to intervene to counteract the fundamental forces that drive FX markets, such as trade patterns, interest rate differentials and capital flows.

### Intervention

The U.S. Treasury has the overall responsibility for managing the U.S. government's foreign currency holdings. It works closely with the Federal Reserve to regulate the dollar's position in the FX markets. If the Treasury feels that there is a need to weaken or strengthen the dollar, it instructs the Federal Reserve Bank of New York to intervene in the FX market as Treasury's agent.

The Federal Reserve Bank of New York buys dollars and sells foreign currency to support the value of the dollar. The Fed also sells dollars and buys foreign currency to try and exert downward pressure on the price of the dollar.

The transactions in the intervention are small compared to the total volume of trading in the FX market and these actions do not shift the balance of supply and demand immediately. Instead, intervention is used as a device to signal a desired exchange rate movement and affect the behavior of investors in the FX market.

The frequency of intervention in the FX markets by the U.S. monetary authorities has reduced tremendously over the last decade. The Federal Reserve Bank of New York intervened only once since 1995.

Central banks in other countries have similar concerns about their currencies and sometimes intervene in the FX markets as well. Usually, intervention operations are undertaken in coordination with other central banks.

Most of the Federal Reserve Bank of New York's activities in the foreign exchange market are for far less dramatic purposes than to influence exchange rates. The New York Fed often intervenes in the FX market as an agent for other central banks and international organizations to execute transactions related to flows of international capital.

Some countries have special arrangements with other countries to help them keep their currencies stable. Many less developed countries have their soft currencies pegged to hard currencies, so their value rises and falls simultaneously with the stronger currency. Some peg, or target, their currency to a basket of hard currencies, the average of a group of selected currencies.

Countries that are part of the European Union (EU) had pegged their currencies to the euro. There were formulas set for converting from the euro to the currency of each member nation. However, since January 2002, all currencies that were part of the Economic and Monetary System of the EU ceased to exist.

Intervention in the FX market is not the only way monetary authorities can affect the value of their countries' currencies. Central banks can also affect foreign exchange rates indirectly by influencing interest rates.

Higher interest rates <input type="checkbox"/>	Value of currency goes up	<input type="checkbox"/>	Investors want to buy currency to invest at high rates
German interest rate 8%	U.S. interest rate 3%	<input type="checkbox"/>	Demand for German mark goes up

## Concerns about Eurocurrency

An important side effect of the increase of international economic activity over the past few decades has been the creation and growth of the **Eurocurrency market**. This is the name given to any bank deposits in any country held in a different country's currency, like U.S. dollars in a British bank. A great deal of foreign exchange market activity involves the transfer of Eurocurrency deposits.

Eurocurrency, especially eurodollars (approximately two-thirds of Eurocurrency are U.S. dollars) are a source of concern to central banks and regulators because they are "stateless money"—subject to very little regulation. Rules governing currency and bank deposits—such as taxes, restrictions on capital movements and exchange controls—do not apply to the currency in the Eurocurrency markets.

Banks around the world use the Eurocurrency market to move and store funds more profitably than they could in many countries. This poses a problem for countries attempting to regulate capital flows.

International trade and foreign exchange cannot be viewed as two separate economic processes. The two are intimately connected on many levels. Increased trade and investment has brought the FX markets to their present level. Together, trade and foreign exchange affect peoples' living standards and livelihoods all over the world.

## Working across Borders

Many large companies are "multinational" in that they have branches and subsidiaries all over the world. By some estimates, intra-firm trade, or trade between branches of the same company in different countries, accounts for 40 percent of U.S. exports.

Many companies buy and sell goods overseas and others form partnerships with foreign companies so that cooperation replaces competition. This has a profound effect on how companies operate in the global marketplace. Businesses around the world work side-by-side to produce and market products, thereby reducing the economic risks of global production and marketing.

For instance, there may be a running shoe company:

headquartered in the United States,  
financed by a Japanese bank,  
buying rubber from Indonesia and leather from Spain,  
manufacturing in Mexico,  
employing a U.S. company for the legal and accounting work,  
and a British firm to handle all its advertising and marketing.

Multinational companies shift resources from one country to another to maximize profits and productivity.

The running shoes may be sold all over the world. If a shoe is shipped from San Francisco to Indonesia, it is simply a U.S. export. However, if Indonesia imposes a tariff on the shoe, it harms more than just the U.S. exporter; all businesses around the world that were involved in the process are affected, including Indonesia's own rubber exports. With globalization, it is increasingly difficult for governments to target trade policies effectively.

To remain competitive, individuals, companies, and governments all must adapt to the changing global marketplace.

Business practices vary from country to country and may require new approaches to making profits. In the United States, a signed contract is considered all but sacrosanct; in the Far East, southern Europe and the Middle East, the spirit of the agreement can sometimes matter more than the letter.

The "get down to business" approach that the U.S. and German businesses usually favor may be considered brusque or harsh in Japan or Korea. Even small details of business behavior—whether or not to look someone in the eye, tone of voice, exchange of gifts—vary significantly from country to country.

## International Organizations and Trade Issues

As trade becomes more and more important to economic well being, international organizations have been formed to facilitate cooperation on trade issues.

The **World Trade Organization (WTO)**, established on January 1, 1995, is the only global international organization dealing with the rules of trade between nations. It was created by the Uruguay Round of negotiations over a 14-year period and has 144 member countries (as of January 2002).

At the heart of the WTO are the various agreements, negotiated and signed by the bulk of the world's trading nations and ratified in their parliaments. These agreements cover a range of topics:

- reductions in tariffs;
- fairer competition in agricultural trade;
- textiles trade;
- trade in services;
- protection and enforcement of intellectual property;
- issues related to anti-dumping, export subsidies, and safeguards; and
- other non-tariff barriers.

The goal of the WTO is to help producers of goods and services, exporters, and importers conduct their business. The agreements have three main objectives:

- to help trade flow as freely as possible,
- to achieve further liberalization gradually through negotiation, and
- to set up an impartial means of settling disputes.

Another organization, the **International Monetary Fund (IMF)**, was founded at the United Nations Monetary and Financial Conference at Bretton Woods in 1944. The IMF is an international organization of 183 member countries, established to:

- promote international monetary cooperation, exchange stability, and orderly exchange arrangements;
- facilitate the expansion and balanced growth of international trade,;
- foster economic growth and high levels of employment; and
- provide temporary financial assistance to countries to help ease balance of payments adjustment.

The purpose of the IMF has remained unchanged but its operations — which involve surveillance, financial assistance, and technical assistance — have developed to meet the changing needs of its member countries in an evolving world economy. Learn more about the IMF

A related organization, the **World Bank**, was founded in 1944 with the primary focus of helping the poorest people and the poorest countries. Its mission is to fight poverty for lasting results and to help people help themselves and their environment by providing resources, sharing knowledge, building capacity, and forging partnerships in the public and private sectors.

The **Bank for International Settlements (BIS)** in Basel, Switzerland, is an international organization that fosters cooperation among central banks and other agencies in pursuit of monetary and financial stability.

The BIS functions as:

- a forum for international monetary and financial cooperation;
- a bank for central banks, providing a broad range of financial services;
- a center for monetary and economic research, contributing to a better understanding of international financial markets and the interaction of national monetary and financial policies; and
- an agent or trustee, facilitating the implementation of various international financial agreements.

The Basel Committee on International Banking Supervision, a committee of the BIS that consists of representatives of some of the world's largest countries, meets to establish uniform financial and performance guidelines for commercial banks around the world.

The **Group of Seven**, or G7, was created in 1975 with the objective of setting up a forum, at the highest decisional level and having formalities reduced to a minimum, in which to discuss important macroeconomic and monetary issues. The group was established with the intent of filling the gap created in the management of the monetary system following the breakdown of the Bretten Woods agreement in 1971.

The G-7 consists of the leaders of the United States, Germany, Japan, France, Great Britain, Canada, and Italy. The Birmingham Summit in 1998 marked Russia's official entry in the Group and the creation of the **G8**. Among other things the Group discusses

- economic issues
- trade relations
- foreign exchange markets

While economic issues still dominate the G8 meetings, discussions on environmental issues and arms control have been included in recent years.

A major change in the economic structures in recent years has been the creation of the **European Union** (EU). It is the result of a process of cooperation and integration that began in 1951 between six countries (Belgium, Germany, France, Italy, Luxembourg and the Netherlands).

After nearly fifty years, and four waves of accessions, the EU today has fifteen Member States. (With many more about to join the economic and monetary community).

One of the main objectives of the EU is to promote economic and social progress. Towards this end, Member States established the single market in 1993 and the single currency was launched in 1999. The completion of the EU's internal "single market" boosted intra-EU trade, which represents two-thirds of the total EU Member States' trade.

Suppliers of goods, services and investment from outside the EU have benefited from the single market program, just as much as people and companies within the EU. The EU has been busy consolidating its single market. Traders at home and overseas can market their goods in the EU based on one set of rules. The single market experience may include valuable elements for the multilateral system of the future. Learn more about the European Common Market.

Other nations have moved to build free-trade zones and common markets as well. Under the **North American Free Trade Agreement** (NAFTA), the United States, Canada and Mexico have agreed to eliminate barriers to trade and to facilitate the cross-border movement of goods and services. The agreement also aims to promote conditions of fair competition in the free trade area and to substantially increase investment opportunities. Learn more about NAFTA

Many smaller "**trade blocs**" are developing all over the world, in North Africa, South East Asia, different parts of Latin America, Eastern Europe and the Middle East. Over the last 50 years more than 100 regional economic agreements have been created.

A **trade bloc** refers to a regional arrangement among countries that have established formal mechanisms for cooperation on trade issues. The term does not necessarily imply a protectionist stance with respect to nonmember countries, although it is sometimes used in this way.

Trade blocs commonly include six types of arrangements: *economic union, common market, customs union, free trade area, preferential arrangement, and regional cooperation organization.*

A possible problem is that competing trade blocs will adopt protectionist policies and slow worldwide economic growth by restricting trade among groups of nations. However, rapid proliferation of trade blocs and free-trade zones has occurred because countries want the benefits of increased trade that accompany lower trade barriers.

The WTO has created a committee to study regional groups and to assess whether they are consistent with WTO rules. The committee is also examining how regional arrangements might affect the multilateral trading system, and what kind of relationship they might have.

### Useful Web Links

#### U.S. related:

U.S. Department of Treasury: Capital Movements Bulletin:

<http://www.fms.treas.gov/bulletin/b21.pdf>

U.S. Department of Commerce: Export Portal:

<http://www.export.gov/docTSFrameset.html>

White House: Economic Statistics Briefing Room:

<http://www.whitehouse.gov/fsbr/international.html>

Census Bureau: Foreign Trade Statistics:

<http://www.census.gov/>

<http://www.census.gov/foreign-trade/www/>

Bureau of Economic Analysis:

<http://www.bea.doc.gov/bea/di1.htm>

Federal Reserve Board: Research and Data:

<http://www.federalreserve.gov/rnd.htm>

Federal Reserve Board: Flow of Funds Data:

<http://www.federalreserve.gov/releases/Z1/Current/Coded/coded.pdf>



### **International Sites:**

World Bank:

<http://www.worldbank.org/>

[http://www1.worldbank.org/wbiiep/trade/services\\_data.htm#Flows](http://www1.worldbank.org/wbiiep/trade/services_data.htm#Flows)

Bank of International Settlements:

<http://www.bis.org/>

European Union:

[http://europa.eu.int/index\\_en.htm](http://europa.eu.int/index_en.htm)

G-7 Home page:

[http://www.g7-2001.org/en/frames\\_c.htm](http://www.g7-2001.org/en/frames_c.htm)

OECD National Accounts:

<http://www.oecd.org/std/nahome.htm>

World Trade Organization:

<http://www.wto.org/>

[http://www.wto.org/english/res\\_e/statis\\_e/technotes\\_e.htm](http://www.wto.org/english/res_e/statis_e/technotes_e.htm)

General Agreement on Trade and Tariff (GATT):

<http://gatt.org/>

North American Free Trade Agreement (NAFTA):

<http://www.nafta-sec-alena.org/>

International Monetary Fund:

<http://www.imf.org/>

International Finance Corporation:

<http://www.ifc.org/>

### **Capital, the Economy and Monetary Policy**

Capital expands the production of society or an individual beyond the levels that could be attained without it and plays a large part in improving productivity and standards of living. The key to understanding capital is recognizing the value of goods and services that are used as resources to produce other goods and services. Buildings and machines, tools and materials, and knowledge, training and abilities are all elements of capital. They are ultimately valuable not as goods and services in and of themselves but because they are the ingredients that enable people to consume more and better goods and services. But while capital provides for consumption, capital requires saving. Only through increased saving can capital investments be made so societies and individuals can increase consumption.

## What Is Capital?

Capital revolves around two aspects of life most of us are quite familiar with—production and consumption. Broadly defined, capital is anything that brings our ideas and abilities to fruition and enables us to produce goods and services more efficiently. For example, computers, lasers, robotics, trucks and cranes are all capital goods. A person's education and training, in the sense that they improve productivity, are capital investments. And funds that are made available for a business improvement or expansion are considered capital in a financial sense.

Capital is valuable because it enables people to consume more and better goods and services than would otherwise be possible. Anything that has enhanced the way we do things—listening to a CD instead of a record, for example—has involved capital. But ironically, for people to consume more and better goods via capital, from time to time they must make decisions to forego consumption and save. For it is only through saving that a society can invest in capital goods and thus lay the foundation for increased and improved consumption in the future.

## The Consumption–Investment Trade-off

Let's say you head out to a remote cabin in Montana for a week to do a little fly-fishing. You bring just the bare essentials for food because, after all, you're here to catch your supper every night. For the first three days, you manage to reel in only one fish per day worth keeping. But you're a really big eater; putting down three fish each meal is more your style. Fortunately, the next morning, while perusing the latest issue of *Fly-Fishing Digest*, you come across an article that shows how you can tie a fly virtually guaranteed to attract loads of fish. You study the how-to diagrams and figure you could tie a couple of surefire flies in just one day. You now have a decision to make: should you give up eating fish today to improve your ability to catch fish tomorrow? You decide to go for it, and in doing so, you have made a capital investment—giving up the consumption of current goods (your fish for the day) to produce capital goods (your surefire flies).

In the same sense, there is a trade-off in society between using resources to consume products today and investing those resources to produce capital goods that will help create more and better products tomorrow. But unlike the fly-fishing scenario, those who forego consumption for saving are not necessarily those who produce capital goods by investing. In a free market economy, savers and investors are brought together in financial, or capital, markets.

When you put your savings in a bank account or mutual fund, for example, a lot of that money is loaned to businesses to finance the purchase or production of capital goods such as plants and machinery and new equipment. But when you save money, it isn't just for a rainy day; it's to earn more money in the form of interest. The interest you earn when you save comes from the cost that businesses pay when they borrow to invest in capital goods.

## Capital and Productivity

The more productive a society is, the higher its standard of living. Two of the major forces behind increases in productivity are increases in the accumulation of capital goods and increases in the quality of human capital.

When workers have more capital goods to use in their jobs, their productivity will generally increase. The more capital goods per worker, the more output per worker. For example, suppose you and a couple of friends own a small advertising agency, complete with three desks and three chairs, a telephone, a computer, and you and your two friends. One of you creates the illustrations, one handles the design and layout, and you write the ad copy. Because the three of you have to share the computer, the agency can only produce ad campaigns for two clients at a time. Then one day, you come across a great deal on a computer at a going-out-of-business sale. You buy the new computer, put it in, boot it up, tell your designer friend and your illustrator friend to use the other computer, and the agency is able to offer its services to four clients at a time. Because of an increase in capital goods (the additional computer), your productivity increases (ad campaigns for two more clients), and your standard of living, thanks to an increase in income, goes up as well.

But while output per worker generally rises as capital goods per worker increase, there is a point at which each successive increase in capital goods begins to have less of an impact on output. That point is when the concept known as the law of diminishing returns comes into play. While adding a computer so ad copy could be produced apart from designs and illustrations allowed your agency to take on two more clients, adding another computer so illustrations can be produced apart from designs may only allow your firm to take on one more client.

When the law of diminishing returns takes effect, further increases in productivity must be obtained somewhere else. This brings increases in the quality of human capital into the picture. Investments in individuals, or investments in human capital, play an important role in advancing a society's productivity and living standards. An economy that incorporates new ideas and technologies to advance its standard of living requires workers who can implement and manage those new ideas and technologies. That's what makes education and training—investments in human capital—a valuable part of the productivity mix.

## Capital Markets and the Economy

An economy is considered healthy when it has high employment, stable prices and sustained growth. While capital markets may not directly impact all these objectives, they do exercise a powerful influence. The availability and cost of funds in capital markets have a big effect on the ability and willingness of businesses to invest. For the economy as a whole, the amount of investment in capital goods is a significant portion of all spending on goods and services, so any changes in the availability and cost of funds in capital markets affect the overall economy.

Capital markets—specifically, the availability and cost of funds in capital markets—are influenced by the Federal Reserve. In fact, the Fed's only direct link to the economy is via capital markets. But economic research shows that the Fed can only influence the supply of money (what people use to buy goods and services), not the long-term supply of capital (what businesses use—whether physical, human or financial—to produce goods and services). Still, the Fed can help the economy through capital markets by setting monetary policy to ensure that there is an appropriate supply of money and credit to maintain growth with stable prices. Without price stability, there is less certainty in capital markets about the future value of funds—what today's dollar will be worth tomorrow. This uncertainty creates a riskier investment climate and prompts providers of capital to hedge their bets, so to speak, by increasing the cost of funds. They do this by raising the interest rates businesses have to pay to invest in capital goods. When businesses face higher costs, they typically respond by investing less, and the economy could suffer as a result.

In addition to the Fed's monetary policy, other factors influence capital investment. Government regulations can require businesses to invest in ways that seek to promote job safety or the environment, for example, rather than more efficient production. Local building code requirements can direct investments away from actual construction and toward efforts to make sure plans are approved by the proper authorities. Tax policies also affect the level of investment, as well as its allocation. But the results are not always positive. Sometimes, changes in tax laws that boost a particular sector of the economy wind up hurting the productivity of the overall economy because capital resources are diverted to industries in which the economy isn't getting the most bang for the buck. In the early 1980s, for example, tax laws provided favorable treatment for investments in commercial real estate. The result was a glut of office space that has taken years to absorb. The laws were changed in the mid-1980s, but the damage had been done. A lot of money had been invested to develop commercial real estate that wasn't needed.

## Capital and Free Markets: A Final Thought

One of the major concerns economists and policymakers have about the United States is that, compared with other industrialized countries, it is not a nation of big savers. And since investment can only be as large as available savings, that means the amount of domestic funds available in capital markets is probably not as great as the amount of investment that needs funding. Moreover, the U.S. government, by consistently operating at a deficit, competes with the private sector to borrow from the pool of savings. This crowds out private sector borrowing and further increases the difficulty of obtaining financial capital domestically.

Fortunately, the U.S. economy largely embraces the concept of free markets, including its financial markets, which means people in other countries can invest their savings in the United States. U.S. businesses can then borrow those savings to finance capital investments. Thanks to the United States' open economy, we have been able to advance our standard of living more quickly than we would have otherwise.

But capital does not always flow as freely around the world as is needed to fill the gap between a country's available domestic savings and its demand for capital. For the United States, this poses a challenge. If we as a nation want to continue to have the highest standard of living in the world, we must continually examine our economy to make certain we have the best possible environment for saving and investment—from a domestic perspective as well as an international one.

## Money, Banking and Monetary Policy

Money, the banking system and monetary policy must work together smoothly for the economy to run well. Money makes it possible for people to exchange goods and services without having to rely on a system of bartering. Banking provides a means for savers to lend their money to borrowers and earn interest in the process, and it gives borrowers a place to go for loans. The aim of monetary policy is to ensure that there is sufficient money in the economy to keep it growing, but not so much that the economy overheats. When the economy overheats, the result is inflation. Inflation—too much money chasing too few goods—creates an inefficient price system. It also distorts decision-making, reduces productivity and lowers the economy's long-term rate of growth. This results in lower living standards for everyone.

## What Is Money?

We may not think we have enough of it, but in many ways, we tend to take money for granted. When you buy a pair of jeans or a CD, for example, you never wonder whether the merchant will accept the bills and coins in your wallet as payment. But suppose money as we know it didn't exist. How would you pay for the things you want to buy?

That was the situation in the early days of the American colonies. British money was scarce, so colonists substituted basic products of their local economies that were always in demand—things like tobacco, grain and fish. For small change, they often received nails and bullets.

But their system, called barter, had many shortcomings. How many fish would it take to buy a bag of flour or an oil lamp, for example? Suppose the merchant didn't want fish, or they spoiled before he could trade them to someone else. Later, as trade developed with other colonies and countries, colonists used various foreign coins, such as gold Spanish reales. That's when money as we know it finally gained a foothold in the U.S. economy.

Money is a medium of exchange accepted by the community, meaning it's what people buy things with and sell things for. Money provides a standard for measuring value, so that the worth of different goods and services can be compared. And lastly, money is a store of value that can be saved for later purchases.

The young United States experimented with a variety of monetary mechanisms for well over a century before settling on today's system, which is based on coins, paper currency and money in bank checking accounts. The early government tried unsuccessfully several times to make paper money work, but people relied mostly on gold, silver and copper coins because they were made of precious metals that had intrinsic value.

Today, though, our coins don't contain any gold or silver. You can see this for yourself by looking at the edge of a dime or quarter; you'll see a copper core, sandwiched between silvery nickel. The metal value of modern American coins is much less than its worth as money. American currency no longer is backed by gold or silver either, but it no longer really matters.

That's because what gives money real value is its purchasing power, not what it's made of. In fact, any economy's health can be measured not by how much money people earn, but by how much their money buys. The overall assortment and quantity of goods and services your money lets you buy reflects your standard of living.

Like diamonds, money is relatively scarce—on purpose—and that's just what makes it valuable. You as an individual want to earn as much as you can, of course. But the national economy can actually have too much money. When the amount of money circulating grows faster than the rate at which goods and services are produced, the result is inflation. Say you want a new pair of jeans, for example. Last year, they cost \$20, but this year an identical pair costs \$23. If prices of most other goods have also risen, then you are probably dealing with inflation—too much money chasing too few goods. Prices have inflated and your \$20 buys less than it did. You must earn more just to stay even.

### The Fed's Role

Keeping prices stable is part of the job of the Federal Reserve, which was created by Congress in 1913. There had been two attempts at establishing a central bank in the United States in the 19th century, but politics killed them even though they were successful. Back then, state-chartered banks issued their own paper money backed only by their individual gold and silver reserves. As a result, there were once more than 10,000 different kinds of bank notes in circulation.

Suppose you owned a store in those days. How would you know which banks had enough gold reserves to make their currency worth its face value? Should you decrease the value of bills from a weaker bank? And how would you keep track of all those bank notes? You can imagine the shopkeeper's dilemma. If a bank went broke, its currency was instantly worthless, and those who held its notes could lose everything.

Naturally, people hurried to withdraw their money at the first hint of trouble in the economy. The result was periodic financial panics that could devastate the national economy for years. Finally, after a particularly bad panic in 1907, Congress decided to solve the problem with the creation of the Federal Reserve System. The Fed was established to provide for a safer and more flexible banking and monetary system.

With the Fed as a safeguard, banks can perform their proper role of bringing savers and borrowers together for the benefit of both. For any economy to be successful, a country first needs political stability so its citizens feel safe; then it needs a stable financial system that includes both trustworthy money and reliable financial institutions. Healthy, profitable banks, therefore, are a vital part of the nation's economic welfare.

Banks provide many services, but for most people, banking consists of depositing their salaries into checking accounts and writing checks on that account to buy things that cost more money than they want to carry in their wallets. People also commonly have savings accounts in which they deposit money they don't need right away or they are saving for a particular purpose. The bank pays interest, or a price paid for use of the money, on savings accounts and often on checking accounts, too.

Very little of this money is kept in the bank's vault, however. While the Federal Reserve requires banks to keep a specified percentage of customer deposits on hand to meet routine withdrawals, they lend the excess. Banks, like any other business, must make a profit to stay in business. Their profit comes from interest people pay on the money they borrow.

### How Banks Create Money

Banks actually create money when they lend it. Here's how it works: Most of a bank's loans are made to its own customers and are deposited in their checking accounts. Because the loan becomes a new deposit, just like a paycheck does, the bank once again holds a small percentage of that new amount in reserve and again lends the remainder to someone else, repeating the money-creation process many times.

The tricky part of monetary policy is making sure there is enough money in the economy, but not too much. When people have the money to demand more products than the economy can supply, prices go up and the resulting inflation hurts everyone. While in the United States we get concerned when inflation climbs above 3 percent a year, we've been more fortunate than some other countries. Just imagine trying to survive in post-World War II Hungary, for instance, where inflation for awhile averaged nearly 20,000 percent per month!

### Monetary Policy and the Economy

Controlling the money supply to help the economy grow steadily without inflation is the Federal Reserve's job. Called setting monetary policy, the Fed does this primarily by buying and selling Treasury securities on the open market. Buying securities on the open market can make it easier for banks to loan money and can give the economy a boost, while selling securities can restrict lending and can help cool down an overheated economy. When the Fed buys securities, the Fed pays for them by crediting the reserve accounts of the sellers' banks. With more money in their reserves, banks can lend more. By contrast, when the Fed sells securities, the Fed collects for the sale by debiting the reserve accounts of the buyers' banks. With less money in their reserves, banks can't lend as much.

Conducting monetary policy is a tremendous responsibility, for the nation's economic health is at stake. You can see why politicians might want to control the money supply for short-term interests. For that reason, the Fed, by law, is not government controlled or funded by Congress. While it is a centralized banking system comprised of 12 regional banks, it is independent in operation.



Besides conducting monetary policy, the Fed also acts as the bankers' bank. As people withdraw more currency to buy things when the economy is booming, the banks in turn pull additional currency from their own reserve accounts with the Fed. When the economy slows down and people increase their savings, banks return the surplus to their reserve accounts. The Fed handles check processing for banks as well, to make sure the billions and billions of dollars in checks written each year move smoothly from one bank to another.

The Fed has other functions also. It helps regulate and supervise banks to keep them financially sound, and it serves as the government's banker by maintaining the U.S. Treasury's "checking account."

### The Fight Against Inflation

It's a complex system, but the goal is simple: to keep the economy stable and growing at a pace that can be sustained without inflation. Economic security underlies nearly every hope and dream people have. It enables businesses to know they can afford to hire more workers, and it lets people plan for the future. If you are saving for college now, for instance, you want to know how much you need altogether and how much you must set aside each month. An inflationary economy can wreck your plans—what you've saved isn't nearly enough anymore, and you don't know how much more will be needed.

A healthy monetary policy, sensitive to changing economic conditions, helps prevent such worries, so you can get on with the business of working to turn your dreams into reality.

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