PREPARED BY ADITYA KAFLE

**Demand:**  
  
Demand is the consumers willingness and ability to purchase in a specific period under certain economic condition. Holding all other factors constant, an increase in the price of a good or service will decrease the quantity demanded, and vice versa. Market demand is the total quantity demanded across all consumers in a market for a given good. Aggregate demand is the total demand for all goods and services in an economy.

Demand analysis:

* Demand analysis is the study of market need, its change in value with time.
* Demand analysis is a research done to estimate or find out the customer demand for a product or service in a particular market.
* Demand analysis is one of the important consideration for a variety of business decisions like determining sales forecasting, pricing products/services, marketing and advertisement spending, manufacturing decisions, expansion planning etc.
* Demand analysis covers both future and retrospective analysis so that they can analyse the demand better and understand the product/service's past success and
* Demand analysis forecasting is estimation of future demand.
* Demand analysis can be done by two approches
  + Statistical analysis
  + Market research

Statstical analysis

* The demand is analysied using past data
* It uses the method called “extrapolation”.
* It uses regression and corelation to analysis the trend of demand.
* Not applicable for new product.

Market analysis

* It is a qualitative data collection method.
* This method gives best result to taste, customer expectation and its value
* Methods are
  + Consumers survey
  + Market experiment

PREPARED BY UNIKA SHAKYA

**Value Added Tax (VAT):**

Value Added Tax (VAT) is a broad-based indirect tax. This means it is an indirect tax which is added to almost all the products we purchase. It is also known as ‘goods and services tax’ (GST). It represents a tax on the "value added" to the product throughout its production process. Here, "value added" means that extra something that a company does to a product that makes it worth more than the cost of its underlying parts. In a VAT system, tax is added at each stage of product cycle.

To understand what this means, consider a production process (e.g., take-away coffee starting from coffee beans) where products get successively more valuable at each stage of the process. When an end-consumer makes a purchase, they are not only paying for the VAT for the product at hand (e.g., a cup of coffee), but in effect, the VAT for the entire production process (e.g., the purchase of the coffee beans, their transportation, processing, cultivation, etc.), since VAT is always included in the prices.

VAT is a modern tax system intended to improve the collection of taxes and to increase efficiency. In other words, it is an improved and modified form of sales tax that does not have any cascading effect. Cascading effect of tax is a turnover tax that is applied to every stage in the supply chain, without any deduction for the tax paid at earlier stages. In simple words, it is “tax on already paid tax”. VAT eliminates this concept of “tax on tax”.

Those who favour value-added taxation make the argument that a VAT system encourages payment of taxes and discourages attempts to avoid them. The fact that VAT is charged at each stage of production rewards tax compliance and acts as a disincentive from operating in the black market: For manufacturers and suppliers to be credited for paying VAT on their inputs, they are responsible for collecting VAT on their outgo – the goods they create or sell.

Example: Dulce is an expensive candy manufactured and sold in the country of Alexia. Alexia has a 10% VAT. Dulce’s manufacturer buys the raw materials for $2.00, plus a VAT of $0.20—payable to the government of Alexia—for a total price of $2.20. The manufacturer then sells Dulce to a retailer for $5.00 plus a VAT of 50 cents for a total of $5.50. However, the manufacturer renders only 30 cents to Alexia, which is the total VAT at this point, minus the prior VAT charged by the raw material supplier. Note that the 30 cents also equals 10% of the manufacturer’s gross margin of $3.00.

History of VAT:

* It was first introduced in France in 1954.
* In 1990s, the concept of VAT existed in various official documents in Nepal.
* Nepal government formulated a VAT Task Force in 1993 in financial and technical assistance of USAID which drafted the VAT documents.
* The parliament passed VAT Act in 1995.
* It was implemented in 1998. Normal VAT rate was 10% at the outset and subsequently increased to 13% since 2005; some goods or services are subject to VAT at 0%.

PREPARED BY NABIN HYANMIKHA

**Taxation in Nepal**

Introduction In today’s world, no one can live without money. A government is also not an exception. The government needs money to carry out various functions for the betterment of people in a country. The government collects the required resource mainly from two sources: 1. Revenues

2. Detb.

In general, Tax can be defined as the levy or other financial charges or fees imposed by local, state or central government on legal entities or individuals. It is a compulsory levy from individual, households and firms to central o local government.

It is a kind or money of which it is the legal duty of every citizen of the country to pay honestly. It may be levied on income, property and even at the time of purchasing a commodity. Tax is computed and paid as prescribed by law.

According to Adam Smith Tax is “a contribution from citizens for the support of the state. “Those who pays the tax do not get corresponding benefits from the government. Tax is not a voluntary contribution but it is compulsory in nature. The tax are spent by government for common interest of the people.

The objective of Taxation are:

1. Raising more revenue: The fundamental objective of taxation is to finance government expenditure. The government carries out different development project and each project requires the finance. This requires finance which is managed by imposing tax.

2. Regulating the Economy: The general concept of regulating the nation’s economy is by imposing the higher tax on importing goods except some expectation and imposing lower tax on the exporting goods. The importing goods which may affect the health of the people like tobacco, liquors are to be imposed with higher levy.

3. Preventing concentration of wealth in a few hands: Tax is imposed on persons according to their income level. Higher earners are imposed with high tax through progressive tax system. Hence, this narrows down the gap between the rich and poor.

4. Re-distributing wealth for the common good: Tax is collected by government and spent by self (government) on the social welfare. In this way the wealth of the rich is re-distributed to whole community. 5. Boosting up the economy The taxation promotes economic growth, stability and efficiency. The government controls the economic activities of the country. “Lower rate of taxation during a business depression will accelerate more business activities. And High rate of taxes may be useful to check inflation pressure on prices”.

6. Reducing unemployment rate: The government will achieve a finance to execute the project. If the project is executed the people from different discipline will be able to get the employment opportunity.

7. Removing regional disparities: The government will collect the tax from overall sector and region. Some region may collect few tax and some may collect efficiently. All the tax collected all over the regions are redistributed to all the regions of the nation as per the requirement of the region. This will help to remove the regional disparities.

History:

The concept of modern income tax was first introduced in 1799 A.D. at Great Britain for first time with the aim to finance the war fought with France. The history of modern income tax is not very old in Nepal. It was introduced in Nepal in early 1950’s when a multi-party democratic political system was introduced. Income tax was first introduced in 1954 AD in Nepal.

Types of Taxes:

1.Direct Tax 2. Indirect Tax

1. Direct Tax:

1.1 Income Tax: The name itself define the types of the tax, i.e. this type of tax is imposed on the personal income. Taxation rates may vary by type or characteristics of the taxpayer.The top earners pay a higher tax rate.

1.2 Property Tax: Property tax is an annual tax on real property. It is usually, but not always, a local tax. It is most commonly founded on the concept of market value. The tax base may be the land only, the land and buildings, or various permutations of these factor.

1.3 Vehicles Tax: Vehicles tax also known as Road Tax, is a tax which has to be paid on, or included with, a wheeled vehicles to be use it on a public road.

1.4 Interest Tax: Interest earned above a certain limit also attracts tax. Interest income earned form saving and investments like a savings account, post office schemes, fixed deposits, recurring deposits, are subject to tax. However, many taxpayers do not know and are not sure how the tax is treated or how their interest income is getting charged under the tax.

2. Indirect Tax:

2.1 VAT (Value Added Tax): A Value-Added-Tax is a consumption tax placed on a product whenever value is added at each stage of the supply chain, from production to the point of sale. The amount of the product, less any of the costs of materials used in the product that have already been taxed.

2.2 Excise Duty: An excise tax is any duty on manufactured food which is levied at the moment of manufacture, rather than at sale. Excise duty are often associated with customs duty, customs are levied on goods which come into existence taxable income.

2.3 Import Tax: Import tax is the tax collected on imported goods. The tax on the imported tax are different on the basis of imported goods. Like the imported goods like alcoholic goods have a very high tax rate.

2.4 Export Tax: Export taxes are taxes on goods or services that become payable when the goods leave the economic territory or when the services are delivered to non-residents; they include export duties, profits of export monopolies and taxes resulting from multiple exchange rates.

Problems of taxation in Nepal:

* Marginally high tax rates
* Lack of tax literacy
* Ineffective billing system in VAT
* Inefficient, indifferent and corrupt tax administration
* Limited tax base
* Low tax elasticity

According to Nepal Federal budget 2076-2077 the tax rates on different sectors are as below: “The government announces an estimated GDP of 8.5 percent and inflation rate of 6.5 percent”

Direct Tax

|  |  |  |
| --- | --- | --- |
| Individuals | Couple | Rate |
| First 400,000 | First 450000 | 1% |
| Next 100000 | Next 100000 | 10% |
| Next 200000 | Next 200000 | 20% |
| Next 1300000 | Next 1250000 | 30% |
| Remaining | Remaining | 36% |

PREPARED BY MANISHA KASALAWAT

**Sales Forecasting**

* It is estimation what a company’s future sales are likely to be based on sales records as well as market research.
* Information used for sales forecasting must be well organized and may include information on the competition and statics.
* Company collect sales forecasting in hopes of identifying patterns so that revenue and cash flow can be maximized.
* **Sales Forecasting** is the process of using a company’s sales records over the past years to predict the short-term or long-term sales performance of that company in the future.

An Example of Faulty Sales Forecasting

* Many Sales Forecasting reports give numbers like “this prospect will provide $200 million in terms of revenue to the company and the company’s profit will be $80 million, from which the Sales Department’s profit will be $10 million.” Unfortunately, no one ever cares to understand where this number came from. Many times, it just so happens that this number is nothing but an arbitrary marking of revenues and profits based on simple theoretical calculation.
* For instance, your company had earned a revenue of $120 million in the previous year and the company’s profit was $32 million. What the forecasters did was to simply use the same numbers to do a relational pegging and upped the figures by 25%. They did this without even bothering to ask the people working in the field about the ground reality.

This type of a faulty planning results in widely incorrect predications and losses in investment oriented expenditures. And this happens because such planning lacks one of the building blocks of SMART planning, i.e., **being realistic**.

**Types of sales forecasting**

* Short term: maximum of 3 months, often effective for analysing budget and markets.
* Long term: minimum of 2 years, good for dealing with growth into new markets or new products.

**Reasons for undertaking sales forecasts**

* Inventory controls ->company will be prepared fo avoiding both overstock and stock-out situations.
* Supply chain management ->manage and control over the supply chain, affords the opportunities to manage resources and take full advantages.
* Financial planning ->provides information we need to predict revenue and profit, explore possibilities to increase both revenue and net income.
* Internal controls ->Having a gasp on the projected production rates for your business makes it possible for you to have better control of your internal operations. By anticipating future sales you can make decisions about hiring – permanent or temporary – marketing and expansion.
* Continuous improvement ->improvement in accuracy and all aspects of business performance.
* Price stability ->With solid forecasting, the good levels of inventories that you maintain will prevent the need for panic sales to rid your business of excess merchandise. Sales may be managed on a thoughtful planned basis.
* Marketing ->Sales forecasting gives marketing an advanced look at future sales and offers the opportunity to schedule promotions if it appears sales will be weak. In extreme cases, sales forecasts may lead to discontinuing slow-moving products.

**Steps in Forecasting**

* Determine the use of forecast
* Select the item to be forecast
* Determine the time horizon of the forecast
* Select the forecasting model
* Gather the data
* Make the forecast
* Validate and implement results

PREPARED BY KABITA DUWAL AND DIKSHYA KARKI

# **Correlation of price and consumption rate**

* Correlation analysis is the technique of studying how the variations in one series are related to variations to another series,
* The correlation analysis helps the manufacturing firm in estimating the price, cost, sales of its products on the basis of other variables that are functionally related to it,
* The correlation analysis is used when the researcher wants to determine the possible association between the variables,

# Types of correlation

* Positive
* Negative
* Simple
* Multiple

# Simple Regression

* It is the estimation of unknown values of one variable from the known values of other variables,
* Regression equation of y on x(correlation of consumption rate and price) *:*

*i.e y* = a + b*x*

where, y = consumption rate

x = price

# Multiple (Correlation of price and consumption rate)

## Multiple Regression

* Multiple regression analysis is a logical ectension of the simple linear regression analysis,
* In multiple regression analysis, instead of single independent variable two or more independent variables are used to estimate the unknown valus of the dependent variables,
* Regression equation of y on *x*1 and *x*2 (correlation of consumption rate and price, advertising expenditure) *:*

i.e  *y* = a + b1*x*1 + b2*x*2

where, y = consumption rate

*x*1 = Price

*x*2 = Advertising expenditure

# Objectives of multiple regression

* To establish a regression equation which provides estimates of the dependent variable from the values of two or more independent variables,
* To obtain measures of error involved in using this regression as a basis for estimation of the dependent variable,
* To measure the coefficient of multiple determination

PREPARED BY KAJOL DHAUBANJAR

**Market Research Techniques**

Techniques

 Consumer Surveys

 Market Experiments

 Consumer clinics and focus groups

Consumer Surveys

 Potential or current customers are asked for their reactions to changes in demand variables  It is done through carefully prepared questionnaires

Advantages

 Flexible

 Relatively inexpensive

Market Experiments

 Firms carry out experiments in actual market conditions

 One or more of the demand determinants is varied

 Expensive method

 Playing with market prices may be risky

Consumer Clinics and Focus Groups

 Simulated market setting is established and consumers are given income to spend on variety of goods.

 The demand variables can easily be manipulated from the reactions shown by the consumers.

 Flexibility

 Very expensive