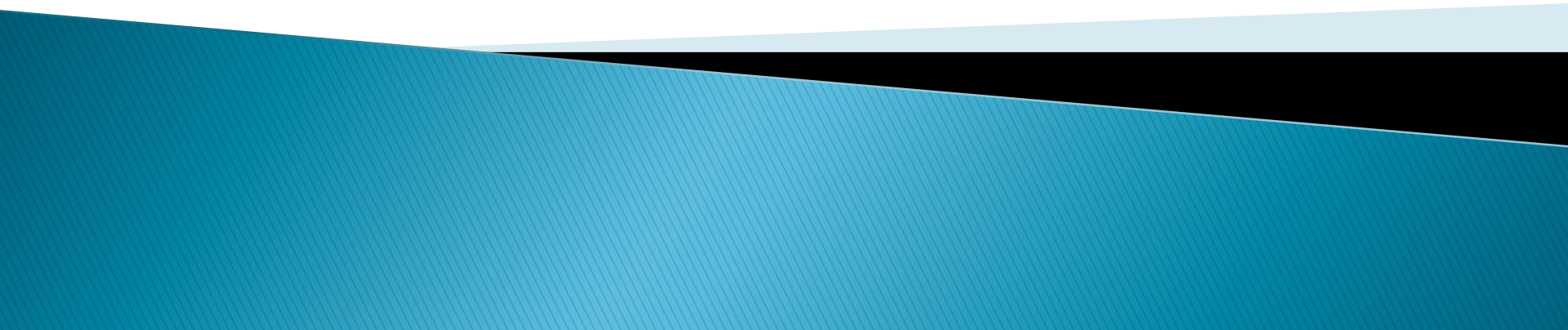


23BAE707 – Security Analysis & Portfolio Management

Unit 3 – Fundamental Analysis









Economic Analysis: Forecasting Techniques

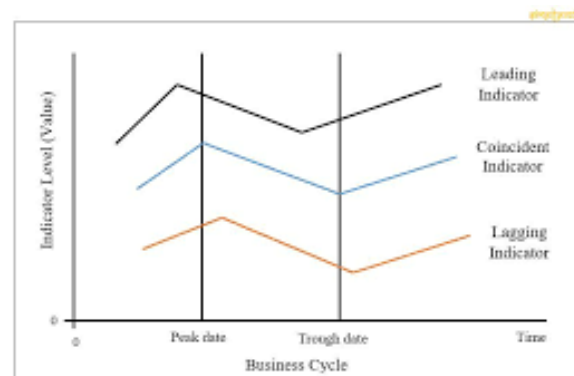
1. Barometric or Indicator Approach
2. Anticipatory Surveys
3. Diffusion Index
4. Econometric model building
5. Opportunistic model building





1. Barometric or Indicator Approach

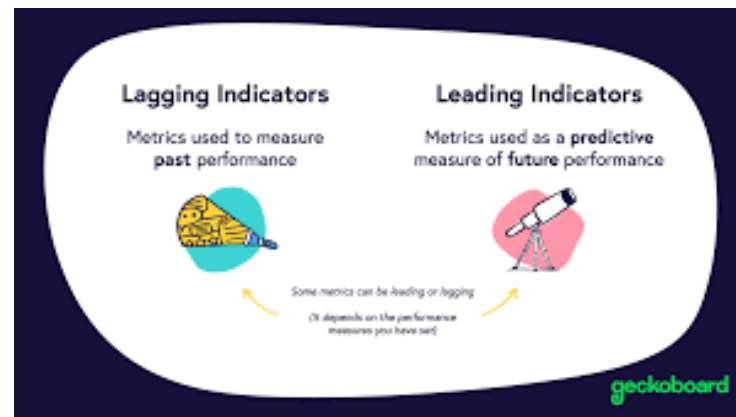
- These indicators are time series data of certain economic variables.
- Classified into
 - ✓ Leading Indicators
 - ✓ Coincidental Indicators
 - ✓ Lagging Indicators





Leading Indicators

- Tells us what to expect in the future
- Some of the leading indexes are
 - Productivity
 - Consumer Spending
 - New Order of Durable
 - Residential Construction – New Building Permits





Coincidental Indicators

- Tells us what is happening in the economy, but do not forecast the future
- Some of the Coincidental indicators are
 - Gross National Product
 - Industrial Production
 - sales recorded by the manufacturing, trading and the retail sectors
 - Interest rates
 - Corporate Profits
 - GDP – aggregate amount of goods and services produced in the national economy.
 - Gap b/w the budgeted GDP and actual GDP attained indicates the present situation.

Leading, Lagging and Coincident Indicators





Lagging Indicators

- Lagging indicators turn after the movement in the coincidental indicators.
- Some of the Lagging indicators are
 - Prime rate
 - Commercial paper rates
 - Inventory sales ratio
 - Retail Sales
 - Average duration of unemployment
 - Consumer Price Index





2. Anticipatory Surveys

- These are the surveys of intentions of people in government , business, trade and industry regarding their construction activities, plant and machinery expenditures, level of inventory, etc.
- Such surveys may also include the future plans of consumers with regard to their spending on durables and non-durables.
- Based on the results of these surveys, the analyst can form his own forecast of the future state of the economy.
- External shocks, such as strikes, political turmoil or government action can cause changes in intentions



3. Diffusion Index

- ▶ It is a composite or consensus index.
- ▶ The diffusion index consists of leading, coincidental and lagging indicators.
- ▶ Has been constructed by National Bureau of Economic Research in USA.
- ▶ Complex in nature to calculate and the irregular movements that occur in individual indicators cannot be completely eliminated.
- ▶ For example, if there are say 9 leading indicators for forecasting the construction activity and if by plotting we find that say, 6 indices show a rise, then we can calculate that diffusion index is $(6/9*100) = 66.7$ percent. When the index exceeds 50 percent, we can predict a rise in forecast variable



4. Econometric Model Building

- Makes use of Econometrics, a discipline that applies mathematical and statistical techniques to economic theory.
- Precise relationships between dependent and independent variables are specified in a formal mathematical manner in the form of equations
- The equations are then solved to yield a forecast.
- The analyst not only forecasts the direction but also the magnitude.





Contd.,

- ▶ The forecast made through econometric method are much more reliable than those made through any other method.
- ▶ For applying econometric technique, the user is to specify in a formal mathematical manner the precise relation between the dependent and independent variable.
- ▶ In using econometrics, the forecaster must quantify precisely the relationships and assumptions he is making. This not only gives him direction but also the magnitudes.



5. Opportunistic Model Building

- Also called as GNP model building or Sectoral analysis
- Analyst initially estimates demand in the economy – Based on it he estimates total income or GNP for the forecast period by considering prevailing tax rates, interest rate, rate of inflation, etc
- Also forecasts GNP figure considering government purchase of goods and services, gross private domestic investment, net exports, etc.



Knowledge Check

- ▶ The diffusion index consists of _____, _____ and _____ indicators.



Thanks...